

COSTS AND DECISION-MAKING PROCESSES
IN NON-PROFIT, GENERAL-PURPOSE HOSPITALS

Hamilton Smith Todd
and
Stephen Charles Rice

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THESIS

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IN NON-PROFIT, GENERAL-PURPOSE HOSPITALS

by

Hamilton Smith Todd, Jr.

and

Stephen Charles Rice

September 1979

Thesis Advisor:

D. R. Whipple

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The authors conclude that cost control mechanisms can focus on either resource availability or resource utilization. The former is seen as multi-influenced while the latter is essentially controlled by physicians. An argument is made for the need to internalize cost information into the physician's clinical judgements.

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Hamilton Smith Todd, Jr.

Lieutenant, Medical Service Corps, United States Navy
B.S., George Washington University, 1978

and

Stephen Charles Rice

Lieutenant, Medical Service Corps, United States Navy
B.S., George Washington University, 1978

Submitted in partial fulfillment of the
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ABSTRACT

This paper surveys the literature on the relationship between hospital costs and decision-making processes. Costs are seen as consequences of decisions made by four groups within the hospital setting: (1) board of trustees; (2) administrator; (3) medical director; and (4) medical staff. These sets of organizational players are studied in terms of functions and responsibilities, compatibility in a professional bureaucracy, powers and influences, and goals. Attempts are made to discern what kinds of decisions are made by each group and what impact those decisions will have on costs.

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I. INTRODUCTION

Over the last 20 years the health care delivery system in the United States has been characterized by spiraling costs. Health care is consuming an ever larger portion of the nation's Gross National Product. The increase in health expenditures can be attributed to many factors, including changes in demographics of the population, technological innovation, growth of health insurance, and increased reliance on government programs such as Medicare and Medicaid. As the delivery of medical care has become more costly and complex, increasing interest has been focused on the organization of the health care delivery system. Much of this attention has centered on the hospital.

Hospital costs have shown the steepest rise of any segment of health care. Consequently, hospitals have received increasing scrutiny from external agencies, both private and public. Most of the recent hospital legislation has focused on cost and quality control. The extent to which such regulatory models are applicable to the hospital setting is open to question. Managerial and clinical efficiency are often seen as conflicting rather than accommodating issues.

Hospital legislation may be characterized in general as moving toward centralization of external, administrative authority. Whether such authority can filter down through the organization of a single hospital is problematic.

The health care literature presents opposing views of the hospital's uniqueness. Some see each institution as a single enterprise, exhibiting such peculiar organizational arrangements as to make interhospital comparisons difficult. Others believe that hospitals exhibit sufficient homogeneity to generalize about the probable outcomes of regulatory interventions.

While recognizing that many of the costs in hospitals are external and largely uncontrollable, such as inflation, one can hypothesize that significant portions of hospital expenditures are internally generated. The purpose of this study is two-fold: (1) to identify the organizational realities of nonprofit, general-purpose hospitals, and (2) to relate these realities to possible cost control mechanisms within the hospital. Research centered on a comprehensive review of the hospital literature, especially those articles and studies describing the political and organizational characteristics of the hospital.

Rather than concentrating on costs directly, attention has been focused on the institution's decision-making process. Such an approach is based on the premise that internally controllable costs are not an independent phenomena, but the direct result of the decisions made by the main players in the hospital setting. Although the hospital contains many varying occupations and roles, the research has centered on four primary groups: (1) governing boards; (2) administrators; (3) medical directors; and (4) medical staff. It is

hypothesized that the nature of hospital costs, as well as cost control mechanisms, are intertwined with the political, organizational, and decisional realities of these groups.

Decisions in the hospital have been studied from three perspectives. Chapter II details, from a somewhat mechanical viewpoint, the duties, functions, and responsibilities of the hospital decision-makers. It is largely normative, describing what each player should do, rather than what he actually does. This chapter sets forth the formal organization of the hospital.

Chapters III and IV examine some of the behavioral aspects of the hospital. Chapter III focuses on the characteristics of professionalization and bureaucratization that occur within the institution. The hospital is seen as a conflict model in its attempts to integrate differing viewpoints of authority and control. Chapter IV synthesizes the types and degrees of influence that each group may bring to bear on the hospital. The power to influence is seen as synonymous with the power to make decisions.

Chapter V looks at decisions in terms of individual, group, and institutional goals. Goals, whether implicit or explicit, are hypothesized to be the results of leverage and power, rather than being established a priori.

Chapter VI reviews decision-making in the hospital and examines some of the studies on resource allocation and knowledge of costs.

Finally, Chapter VII analyzes the issues raised in the literature. It integrates the collective knowledge on tasks and functions, power and influence, and goals. Attempts are made to discern what kinds of decisions are made by each group and what impact those decisions will have on costs.

II. FUNCTIONS AND RESPONSIBILITIES

The American Hospital Association (AHA) has stated that the "general responsibility of all health care institutions is to meet the health care needs of their communities effectively and economically." [American Hospital Association 1972, p. 3].

The formal organizational structure formulated to meet this objective is relatively uniform from hospital to hospital. It consists of a governing board, administrator, medical staff, and more recently, a medical director. On the macro-level, the functioning of these individuals and groups combine to frame some general characteristics of the modern hospital. Georgopoulos and Mann [1962] have summarized these as follows:

1. High degree of specialization and division of labor.
2. High degree of interdependence among various positions in the hospital.
3. Human rather than machine system.
4. Highly formal, quasi-bureaucratic organization structure.
5. Authoritarian because of the need for maximum predictability and efficiency of performance.
6. Tendency to adhere to traditional ways of performing tasks.
7. Professionalism.
8. Dual lines of authority.

As expected, these characteristics create organizational difficulties somewhat unique to the hospital setting. In the

late 1940's, Ray E. Brown, a former president of the American Hospital Association, had this to say about the uniqueness of the hospital structure:

No other form of organization can equal the obstacles to tranquility that are present in the medical staff-administrator-trustee triangle. The picture of third party independent contractors responsible for specifying the services rendered to the clientele of the enterprise, at once dependent upon the enterprise for carrying out their orders, but independent of the enterprise in their relationships with the enterprise's clientele, is not to be found in any other type of enterprise. While they are not stockholders in the hospital, they have a deep abiding proprietary interest because their livelihood to an ever increasing extent is dependent upon the hospital. [Gordon 1964, p. 59].

The purpose of this chapter is two-fold: (1) to isolate the formal organizational responsibilities of the governing board, administrator, medical director, and medical staff, and (2) to identify any trends that may be occurring within those of each group. The research relies on both articles by individuals working in a hospital setting and guidelines published by medical organizations. Few of the authors attempt to deal with all of the parties in a single article. The most complete listing of functions was found in guidelines published by the American Hospital Association and the Catholic Hospital Association. Because of their importance and length, they are included as Appendix A and Appendix B respectively.

A. GOVERNING BOARD

The role of governing boards varies by hospital. The kinds of roles suggested for governing boards can be summarized

as follows: (1) the board sets policy and makes major decisions; (2) the board gains resources for growth and survival; (3) the board represents the community; and (4) the board is advisory to top management. Of course, these roles are not exclusive and may be found in varying degrees in all hospitals.

Despite the varying roles that a board may assume, studies have indicated that the composition of boards display many similarities. Kovner [1974] found that the typical hospital board member was male, from 50-69 years old, and had been on the hospital board for more than five years. Additionally, the majority are businessmen, bankers, or lawyers. Similar results were obtained in studies by Berger, Goldberg, and Wentz.

Although the majority of trustees were in the three career classifications listed above, it would be of some interest to know all the different individuals who have some input into the governing process. The results of such a study conducted by Gilmore and Wheeler [1972] are detailed in Table I. Of particular interest is the finding that physicians participated on a majority of the boards. In the past, the governing board of not-for-profit hospitals has been composed primarily of individuals who are neither employed by the institution or a part of its medical staff. However, in recent years there has been a trend toward including administrators and doctors on the board. This is particularly true in the case of physicians.

TABLE I
HOSPITALS WITH AT LEAST ONE MEMBER
IN CAREER CLASSIFICATION

Career Classification	Number of Hospitals N = 48448	Percent of Hospitals
Medicine	244	54.4
Other Health Professions	141	31.6
Other Professional Groups	350	78.1
Clergy	166	37.1
Executives	383	85.5
Self-Employed	234	52.2
Small Business Proprietor	224	50.0
Blue-Collar Supervisor	67	14.9
Blue-Collar Worker	21	4.7
Auxilian	101	22.5
Housewife	157	35.0
Other	165	36.8
Minority Group	48	10.7

[p. 106].

The American Hospital Association (AHA), in its guidelines on "Governance of Health Care Institutions," adopted in February 1978, stated that:

[Physicians] should be selected [to the governing board] for their ability to assist the institution in achieving its goals. The charge to the physician should be the same as that for any other board member. Every member, including the physician, should recognize that his leadership must be directed toward assisting the institution. ["On Involving Physicians in Hospital Governance" 1978, p. 38].

AHA surveys of non-governmental, not-for-profit hospitals indicate the following trend in physician membership on boards of trustees:

TABLE II
TRENDS IN MEDICAL STAFF MEMBERSHIP ON GOVERNING BOARDS

	1971 n=2,904	1973 n=2,571	1976 n=2,904	1977 n=2,896
All Hospitals	50%	67%	77%	78%
Fewer than 100 beds	40%	56%	67%	67%
100 Beds or more	56%	73%	82%	83%

[Kessler & Tracy 1978, p. 50].

Again, although the survey shows a movement toward physician involvement, it may be interesting to identify which elements of the medical staff are involved. Additionally, one would like to know the voting status of each physician member. In the 1976 study of 2,904 hospitals, it was determined that in 29% the medical staff president served on the board with full voting privileges, in 20% the president of the medical staff sat on the board but did not vote, 20% had other medical staff officers on the board as voting members, 6% had other medical staff officers without vote, 50% had non-officer medical staff members on the governing board with voting privileges, and 2% had such members serving without a vote.

A note of caution is appropriate at this point. Although the literature is overwhelmingly in favor of physician membership on governing boards, there is little evidence supporting a correlation between board composition and hospital performance. Solutions that encompass restructuring of the board, such as consumer and physician involvement, may be intuitively desirable but offer no promise of success in improving institutional performance.

In the preceding paragraphs some general characteristics of the board have been discussed, as well as the trend of increasing physician involvement in the governance structure. Returning once again to the duties of the governing board, the literature offers a wide spectrum of thoughts. Each writer, based on his own background and perceptions, views the primary role of a trustee differently.

Since case law and some statutory provisions now require the board of trustees to ensure the quality of care provided in the hospital, some writers believe that the ultimate responsibility of the board is control over medical staff appointments and the determination of individual staff privileges. The governing board exercises this control function through the review and approval of medical staff bylaws. It is their duty to ensure that the bylaws reflect the overall hospital organization and objectives. On the other hand, Christian [1972] believes that the most critical duty of the board is the choosing of a chief executive officer (CEO).

Hicks [1975] believes that since hospital boards tend to be self-perpetuating, the primary responsibility of "today's trustees is to ensure a continuing board characterized by integrity, high quality, purpose, and adaptability to change." [p. 41]. O'Connor [1977] views the functions of the board as choosing the CEO; developing hospital priorities; defining the administrative team; evaluation; being informed and consistent; setting the social, educational, and business climate of the institution; and asking the right questions at the right time. His solution to hospital management problems is based on strengthening the structural and functional relationships to improve top management communications. A somewhat less flattering view of a governing board's role was penned by Townsend [1970] when he described its function as a "tree full of owls--hootting when management heads into the wrong part of the forest." [p. 101].

Koontz [1976] has identified the duties of the board from a different approach. He has described the functions of the board in terms of the decision-making powers it should reserve for itself. These responsibilities include decisions (1) prescribed by law or charter, (2) determining total enterprise objectives or goals, (3) involving approval of major strategies and policies, (4) involving appointment of officers and major managers, (5) involving approval of top management compensation, (6) involving approval of budgets, (7) involving approval of major plans and program commitments, and (8) involving approval of independent auditors and general counsel.

Even though the literature offers diverse comments on the board's responsibilities, many of the functions recur. In general, the normative writings identify the following as functions of the governing board:

1. To establish corporate goals and major policies.
2. To ensure that plans and programs are implemented to meet corporate needs.
3. To establish and maintain procedures for conducting the business of the governing boards.
4. To provide for the hospital's long-range financial stability.
5. To select and maintain a qualified medical staff and to ensure that the staff is properly organized.
6. To evaluate all phases of hospital performance, including the quality of medical care, and ensure that established standards are met.
7. To select the chief executive officer, define his duties and responsibilities, and evaluate his performance.
8. To review and approve the hospital's overall organizational structure.
9. To ensure that the community the hospital serves is well informed about the hospital's goals and performance. [Prybil 1976].

Although the literature is replete with normative statements regarding the functions of trustees, little effort has been made to empirically test these assertions. One exception to this oversight is a study conducted by Hickey [1972]. The initial phase of his research consisted of a literature review to determine whether general agreement on the functions of hospital boards of directors exists. He concluded that ten management responsibilities were significant and recurring:

(1) establish institutional objectives, (2) organize the board of directors to perform the work of the board, (3) review and approve major plans and programs, (4) review and approve major institutional policies, (5) select, appoint and evaluate the chief executive officer, (6) maintain qualified staff, (7) perform advisory role to operating management, (8) review and approve major institutional decisions, (9) evaluate institutional performance, and (10) trusteeship. If Hickey had concluded his work at this point, his contribution would have been of some interest but hardly valuable as an insight into the actual workings of the board. His work, like that before him, would have remained largely normative rather than descriptive. However, Hickey sought to test his literature-based model by surveying practicing hospital trustees as to their agreement with his list as well as a ranking as to the importance of each. Out of 527 respondents, between 90 - 99% agreement was indicated except for function (6), "Maintain qualified medical staff," which received approximately 80% agreement. Twelve percent of the respondents offered additional functions with primary emphasis on (1) public relations, (2) finance and fund raising, and (3) long-range planning.

From the standpoint of understanding the trustees' perceptions of their responsibilities, the data on the relative importance of each function are significant (see Table III).

TABLE III

DIRECTORS' RANKING OF THE IMPORTANCE OF THE FUNCTIONS
OF HOSPITAL TRUSTEES BY PERCENTAGE OF RESPONDENTS

Function	High	Medium	Low
Select, Appoint & Evaluate CEO	93.21	5.52	1.27
Establish Institutional Objectives	90.96	7.11	1.93
Review/Approve Major Plans & Programs	90.32	8.47	1.21
Review/Approve Major Hospital Policies	87.24	11.52	1.24
Trusteeship	84.36	12.85	2.79
Maintain Qualified Medical Staff	82.07	15.49	2.44
Evaluate Institutional Performance	78.08	19.40	2.52
Organize Board of Directors	77.70	17.88	4.42
Review/Approve Major Institutional Decisions	76.07	21.55	2.38
General Advisory Role to Management	63.78	29.44	6.78

49].

One startling result of the survey is the significant number of trustees (24%) who view their responsibilities on major institutional decisions as less than high. Additionally, although the selection of the CEO rates as the primary duty, a subsequent advisory role to the CEO ranks at the very bottom of the list. This would seem to indicate that trustees view their most important duty as appointing the administrator to operate the hospital and then reviewing and approving what he does and recommends.

B. ADMINISTRATOR

The hospital literature on functions of the administrator includes writings of both a normative and descriptive nature. A few of the authors suggest a uniqueness or singularity to hospital administration. Most have included administrators in the larger, managerial role.

The governing board--administrator relationship is frequently described in the following manner: the administrator recommends, the board approves, and the administrator subsequently implements the approved policies [Ainsworth 1976]. "However, the administrator is also a representative of the consumer, and, as chief executive of the organization, of the non-physician employees whose willingness to participate must be obtained for the organization to be effective." [Kovner 1978, p. 364].

A chief executive officer of the hospital is known variously as the superintendent, the hospital administrator, the executive director, the executive vice-president, and the president [Johnson, E.A. 1966]. Richard L. Johnson [1970] views the role of the executive head of the hospital as one evolving from superintendent to president. He says that such a shift has not occurred for prestige reasons but rather because of the changing role of the chief executive.

However, a survey conducted by Wren and Hilgers [1974] indicates varied reasons for title changes. A questionnaire was sent to 265 hospitals who had changed from an administrative title to an executive title. One hundred eighty replied

for a 68% rate of return. Two hundred fifty-eight responses were received because some respondents gave more than one answer. These were classified as follows: 71 respondents felt the new title more adequately described the position; 73 indicated that it resulted from a change in the organization; 33 said it was directly related to increased responsibility of the hospital administrator; 19 said that it was suggested by the board of directors; 17 agreed that "it's a trend," 15 thought the public related to it more easily; 11 indicated that a new man assumed the job who wanted an executive title; 10 said the change was made when the hospital administrator became a member of the board; 4 felt this change in title would be politically expedient; and 3 said it was suggested by a consultant.

Austin [1974] points out that administration consists of two primary subsets, internal functions and external responsibilities. The former relates to the administrator's functions within the institution and includes such tasks as organization, budgeting, control, and evaluation. The latter focuses on the institution's interactions with the environment and includes such tasks as program planning, policy decisions, and coordinating with other health care entities. Gottlieb [1975] has suggested that institutions characterized by an internal/external dichotomy are likely to have both a chief executive officer (or president) and an administrator. The former is externally oriented while the latter deals with the institution's day-to-day operations.

As noted previously, there is growing support for administrator membership on governing boards. Brown [1970] has pointed out that the internal workings of the hospital have become so complex that the board of trustees is losing its policy-making ability relative to the administrator. He suggests that because the administrator's day-to-day actions are, in effect, implicit policy, the administrator should become a voting member of the board. In this way, the administrator and the board become unified in providing direction to the institution.

"The administrator is, essentially, an extension of the board, fulfilling the hospital needs for direction by acting as the board would act in directing the day-to-day activities of the institution." [Opp 1962, p. 19]. Stated another way, the administrator functions as the agent of the board, with the board being the principal. This relationship is supported by Cartmill [1970], who points out that because an administrator is an agent of the board, he is also a part of the board. From his perspective, the hospital consists of two important entities: (1) the governing board/administrator on the one hand, and (2) the medical staff on the other.

A majority of the literature views the role of an administrator from the standpoint of traditional organizational theory. The Commission on the Education for Health Administration has defined health administration as "planning, organizing, directing, controlling, and coordinating the resources and procedures by which needs and demand for health and

medical care and a healthful environment are fulfilled by provision of specific services to individual clients, organizations, and communities." [Austin 1974, p. 14]. Schulz and Johnson [1976] have described the functions of administration as: (1) establishing or helping to establish institutional goals and objectives; (2) planning strategies, policies, and tactics to achieve goals; (3) establishing a managerial climate for carrying them out; (4) establishing and controlling systems and subsystems; and (5) integrating systems.

Johnson [1970] describes the primary responsibility of the administrator as one of coordinating diverse interest groups, of developing long-range plans, of determining capital needs and sources, and of controlling the operations of the hospital. Kovner [1978] believes the most important function of an administrator is to act as a "change agent." This view is based on the need for orderly change to deal with such institutional problems as increased specialization, changing technology, and new health care expectations. Thus, the administrator is seen as a facilitator and integrator.

Studies focusing on what an administrator actually does are also usually structured from the traditional managerial perspective. For example, in a work sampling study, Connors and Hutt [1967] found that administrators spent time on the following activities, in order:

1. Extramural Tasks: activities which have no direct relationship to the internal operations of the hospital, yet

are vital parts of the administrative function; they include: continuing education, teaching and lecturing, and activities with outside agencies.

2. Planning: defining and clarifying problems, determining facts and alternative solutions, choosing a solution, and arranging for execution.

3. Controlling: checking and reporting of performance.

4. Organizing: dividing and grouping work to be done, assembling resources.

5. Directing and Coordinating: giving instructions; indicating what, how, and why a job should be done.

6. Personal Tasks: lunch, coffee breaks, and other activities not related to the job.

In general, the functions and responsibilities of hospital administrators appear to be ill-defined in the literature. Although it is generally agreed that they act as agents to the board of trustees, specific identification of duties seems to be limited to the traditional management function euphemisms of planning, organizing, directing, staffing, and control.

C. MEDICAL DIRECTOR

The position of a full-time medical director is a relatively new occurrence in hospital organization. It has largely come about from court decisions and legislative actions that have held the board of trustees both morally and legally responsible for the quality of professional services provided by the institution. The landmark case in this area is Darling

vs. Charleston Community Memorial Hospital, where the court said that it is the hospital governing board's duty to establish mechanisms for the medical staff to evaluate, counsel, and when necessary, to take action when an unreasonable risk of harm to a patient arises from his treatment. Prior to this judgement, the legal responsibility of trustees had focused primarily on the board's duty to select competent administrators.

Other forces causing an increase in the number of full-time salaried medical directors are the increasing complexities of the hospital organization and increasing demands for public accountability [Williams 1978]. Thus, the medical director came into being as a member of the administration, responsible for the medical staff and their activities in the hospital.

Although there is general agreement among trustees, administrators, and physicians that the medical director is a "company man" whose primary allegiance belongs to the hospital rather than the medical staff, his position in the top management structure remains somewhat muddled. Should he report through the administrator or directly to the board of trustees? What is his relation to the medical staff and what input should the medical staff have in his selection? And finally, what mix of professional and administrative responsibilities should he have vis-a-vis the hospital administrator?

The level of the medical director's responsibilities may be viewed from two general perspectives: (1) the director

should function as a coordinator with no authority connected with his duties; or (2), the director functions in a hierarchical position with authority over the medical staff. Wilson [1971] suggests that in the former the medical director is primarily a physician, while in the latter, administration predominates. However, Fischer [1975B] believes that the medical director actually functions from a combination of both: "The essence of the physician-director's authority is his ability to lead those responsible for making the decision to the correct choice." [pp. 46-47]. This seems to suggest that the medical director must have both power and influence within the organization to be effective. Additionally, it implies that the director must possess both professional competence and administrative expertise. As Fischer has commented, the position of medical director has created a new medical subspecialty--hospital management.

Since few authors agree with regard to the exact role of the director, the duties ascribed to him are varied. One author has proposed that physicians and hospitals both pursue the same ultimate goal, the provision of quality patient care. Therefore, "conflicts arise only in connection with how that care is to be provided--not by whom, but in what manner. The task of the medical administrator, then, is to avoid conflicts because only means, and not ends, are involved." [Kemp 1973, p. 19]. Kemp's perspective assumes a separation of processes and outcomes that may not exist. Since "quality health care" is largely unmeasurable, it is inherent that conflicts will center on alternative means of providing care.

Others view the primary responsibility of the director as promoting an effective organization of the medical staff because, through this effort, the medical director has the most impact on the improvement of institutional care [F. Wilson 1971]. Peters [1974] believes the functions of a medical director should include medical staff organization, clinical department supervision, patient care evaluation, medical education and research, long-range planning, credentialing, and liaison between the medical staff, administrator, and governing board. Another writer views the director's duties as recruiting, internal management, external management, complaints, and the development of new ideas [Pollard 1976].

Williams [1965] suggests that the medical director operate as a "multicrat." This involves functioning: "(1) as a democrat, prepared to compromise if he is going to get his key people to give leadership and accept responsibility for the professional practices of their confreres; (2) as a bureaucrat when it is necessary to think of the institution and the development of total systems; and (3) as an autocrat when firm, hard decisions have to be made when he alone is going to have to answer for success or failure." [p. 74].

In summary, the position of the medical director is evolving along two fronts: (1) the identification of his responsibilities and authority in regard to the medical staff, and (2) his position and functions relative to the hospital's administration. The former is becoming increasingly well

defined in the literature. Williams [1978] has constructed a comprehensive list concerning the scope of the medical director's medical staff responsibilities:

1. To assure that appropriate systems--essential for the ongoing review, analysis, and evaluation of physician's performance--are established and maintained on a continuing basis.
2. To keep informed of the activities and findings of all medical staff surveillance programs and to promptly direct the necessary corrective measures.
3. To keep the administrator and the board informed of such findings and to report the necessary recommendations for action whenever the findings so require.
4. To monitor and assure medical staff compliance with corporate bylaws, medical staff bylaws, rules and regulations, hospital policies, and local, state, and federal regulations.
5. To keep the CEO, the president of the staff, and the executive committee of the medical staff informed of all infractions and violations of hospital policy, and to submit a plan for corrective action as indicated.
6. To assure that the necessary criteria and professional standards regarding applications for appointments to the staff are established and strictly adhered to.
7. To assure that a procedure for supervision of all new appointees for a stated period of time is established and kept viable and that routine reports are made at stated intervals to the executive committee and to appropriate committees of the board.
8. To make certain that all members of the medical staff are afforded due process whenever, for any reason, their clinical performance is open to question, whenever disciplinary procedures are contemplated, or whenever their clinical privileges may be reduced, rescinded, revoked, or temporarily suspended.
9. To establish and maintain formal programs of continuing medical education.
10. To direct and guide chairmen of clinical departments and committees in setting and attaining objectives for the continuing improvement of the quality of medical care.

Virtually all of these functions were previously the responsibility of the medical staff president, at least in kind if not in degree. The transfer of these duties to the director may be viewed as an attempt to increase the hospital's formal control over the medical staff.

Conversely, the relationship between the medical director and the administrator remains vague. This is not surprising as the authority and responsibility of the medical director (relative to the administrator) are not uniform from hospital to hospital, but rather seem to be individually negotiated among the parties involved.

D. MEDICAL STAFF

The final component having responsibility for the management and operations of the hospital is the medical staff. It is a self-governing organization comprised of all the physicians who have been granted privileges to practice in the hospital.

The Joint Commission on Accreditation of Hospitals (JCAH) states: "There shall be a single organized medical staff that has the overall responsibility for the quality of all medical care provided to patients, and for the ethical conduct and professional practices of its members as well as accounting therefore to the governing board." Kennedy [1974] details four reasons for the existence of an organized medical staff.

1. To provide in an organized and logical manner for the care of all patients referred to the hospital.
2. To provide a means by which problems of a medical-administrative nature can be discussed with the board and administration.

3. To govern and administer its own members.
4. To provide a facility for teaching interns, residents, and others if the hospital has an educational program.

The functions of the organized medical staff may be summarized as: (1) providing professional care to the sick and injured in the hospital; (2) maintaining its own efficiency; (3) self-government; (4) participating in education; (5) auditing the professional work; and (6) furnishing advice and assistance to the administrator and governing board [MacEachern 1957].

A number of writers, in an attempt to clarify the organizational responsibilities of the medical staff, have observed that medical staff self-government should not be taken to mean that the medical staff is autonomous. Rather, the medical staff derives its authority to organize and elect officers within the parameters set down by the governing board. Specifically, the physicians determine medical staff policy, membership eligibility, professional standards, and performance evaluation mechanisms, subject to the approval of the board [Harrison 1972; Johnson 1970; & Peters 1974].

The governing board delegates to the medical staff the responsibility for the quality of patient care. Simultaneously, the board must set a mechanism by which the medical staff will be accountable for their actions [Fischer 1975B].

Johnson [1976] suggests that each medical staff exhibits two organizational structures: a political element and an administrative element. The first is characterized by the

election of officers and focuses on upward communication from the medical staff to the governing board. The second is a hierarchical relationship whereby authority is delegated to the medical staff by the governing board. Johnson contends that while both are important, only the latter allows a suitable accountability structure to be developed. He envisions three factors that will facilitate such accountability:

1. Delegations of responsibility from the governing board to the medical staff must be clear-cut and identifiable.
2. Authority must be granted to physicians in positions of formal leadership in the medical staff so they have control over the responsibilities they have accepted.
3. The governing board must require accountability from those members of the medical staff who have accepted positions of formal leadership.

Whereas the medical director is appointed by the governing board, the medical staff retains the right to elect its own officers. The head of the medical staff usually carries the title of president. Since his power base is derived from the medical staff constituency, his actions should be designed to represent the views and interests of the medical staff. Williams [1978] has described the functions of the president of the medical staff as those analogous to a shop steward. The president lacks the formal organizational authority but has considerable influence over the hospital's operation.

In addition to the president, the medical staff elects other officers, such as vice-president, secretary, and treasurer. These individuals, in combination with other staff-elected and board-appointed representatives, form the medical

staff executive committee. This body represents the primary medical staff input into the operations of the institution. The medical director, and occasionally the administrator, are included in an advisory role. According to JCAH standards, the functions of the executive committee should include the following:

1. Receive and act upon reports of staff committees.
2. Consider and recommend action on all matters of a medico-administrative nature.
3. Implement approved policies of the medical staff.
4. Make recommendations to the governing body.
5. Take all reasonable steps to ensure professionally ethical conduct on the part of the staff members and to initiate such prescribed corrective measures as are indicated.
6. Fulfill accountability to the governing body for the medical care rendered to patients in the hospital.
7. Ensure that the medical staff is kept abreast of the accreditation program.

The remaining medical staff committees are primarily concerned with some aspect of utilization review or professional standards and include such entities as medical audit committee, tissue committee, medical records committee, and pharmacy and therapeutics committee.

Other mechanisms exist, outside the formal medical staff organization, for physicians' input into the institution's management. As mentioned previously, physicians are becoming more acceptable as members of the governing board. However, some difficulties may arise in the perception of the duties of a physician trustee. The medical staff may see him as

their representative first and the hospital's agent second. On the other hand, should the physician trustee support decisions that are perceived as unfavorable to the medical staff, he may be regarded as a "company man." It is clear that the physician trustee, despite his increasing membership on governing boards, walks a thin line between professional responsibilities and trusteeship.

Not all writers are in favor of increased physician participation on hospital boards. Bugbee [1970] contends that the medical profession needs a "power base" that the public will perceive as objective. Although he doesn't specify the form of such a power base, he does feel that physician involvement in governance might be considered by the community as the beginning of physician dominance. Over forty years ago, MacEachern listed the following difficulties with physician representation on governing boards:

1. The physician would have competitive advantage over his fellow staff members in private practice.
2. The physician board member would tend to represent himself and not the staff as a whole.
3. There would be conflict of interest involved when the physician functions on the one hand as a trustee serving the best interests of the community and the hospital, and on the other as a member of the medical staff, serving his own ends to advance the status and success of his practice or to accommodate the partisan desires of his medical colleagues. [Eisele 1971].

MacEachern's objections tend to exemplify the difficulties of physician representation. In fact, MacEachern himself fails to clarify his perception of the physician trustee's loyalty and duty. Should he, in fact, represent the medical

staff as implied by objection two? Or should he serve the interests of the community and hospital as implied by objection three?

Other methods for obtaining physician involvement are medical staff officer attendance at board meetings in an advisory capacity and appointment of staff physicians as members of governing board committees.

Although the medical staff has, by virtue of its organization and bylaws, a formal position within the hospital, the reader is cautioned against the assumption that physicians are a homogeneous lot. In fact, many issues fractionalize the medical staff. Some of the more obvious include:

1. Competition: political in-fighting between factions of the medical staff.
2. Role of the general practitioner vs. specialists in the hospital.
3. Town vs. gown: rivalry between teaching and practicing physicians and the role and power of the medical school in the hospital.
4. Struggle for beds: high occupancy hospitals and the competition among physicians for beds.
5. Jurisdictional disputes: decisions concerning clinical privileges. [Gottlieb 1975].

In general, physicians with administrative responsibilities within the hospital fall into two categories: (1) those elected by the medical staff; and (2) those appointed by the board. The former become the leaders of the medical staff and represent the staff's views to the administration. The latter bear primary allegiance to the institution. Clearly, there is room for varying perceptions and goals among these

two groups. When the diversity of specialities within the medical staff is added to this dichotomy, it is somewhat difficult to view the hospital physicians as a single group. Differing constituencies, as well as differing objectives, militates against a unified, physician-oriented institutional goal.

E. SUMMARY

The preceding pages have discussed both the functions of the main players within the hospital setting as well as some of the trends within each group. A summary of the trends predominant in the literature can be listed as follows:

1. Trustees are held to be legally, as well as morally, responsible for the quality of care in the hospital.
2. Physicians are winning increasing acceptance as members of the governing board.
3. Administrators are evolving from the traditional "superintendent" position of managing hotel services to one of "chief executive officer," responsible to the board for the hospital's operation.
4. Medical directors are finding increasing acceptance as the administrator of the medical staff, representing the institution in hospital-medical staff relationships.
5. The organization of the medical staff has remained largely unchanged with the exception that the functions of the president of the staff must be redefined in relation to the tasks of the medical director.

These trends seem to indicate that the hospital has recognized that: "Administrative activities increasingly touch upon the practice of medicine, and clinical practice, in turn, is heavily involved with issues of managerial efficiency and effectiveness." [Shortell 1974, p. 97].

At first glance, one might assume that each party is being co-opted to a degree into another party's traditional position. Alternatively, one might view these trends as power struggles designed to influence the organization's structure and internal workings. One striking feature of the literature review on functions and responsibilities is the lack of information relating goals to the tasks described. Other than a few vague comments asserting that all hospital members have "quality care" as their guiding principle, goals at both the individual and institutional level are ignored. One hypothesis of this paper is that goals should precede the identification of duties. To this end, the following chapters review the micro-institutional literature from a behavioral and structural perspective. One would like to identify what goals the various interests in the hospital have, and, equally important, determine how and why these goals are chosen.

III. PROFESSIONALIZATION AND BUREAUCRATIZATION

Organizations are social units consisting of a network of relations which orients and regulates the behavior among a specific set of individuals in the pursuit of relatively specific goals. An organization is said to be formal to the extent that positions are identified and defined and relations with other positions specified independently of the characteristics of the individuals occupying the positions [Scott 1964]. Simon points out that organizations are "complex patterns of communication and other relations in a group of human beings. The pattern provides to each member of the group much of the information, assumptions, goals and attitudes that enter into his decisions, and provides him also with a set of stable and comprehensible expectations as to what the other members of the group are doing and how they will react to what he says and does." [Simon 1957, p. 10].

Each participant in the hospital tends to view the organization and other participants from different perspectives. Each participant has, by virtue of his or her location in the structure, a set of interests that influence attitudes toward organized activities. If the activity has no perceived effect on those activities, the stance is often indifference; if it is perceived as enhancing the interests, then the stance is positive and if it is perceived as being against the interest, the stance will be negative.

Much of the anecdotal literature dealing with the hospital setting has focused on "dual lines of authority"; the physician on one hand and the governing board/administrator on the other. When sociologists review this feature of the hospital, they tend to view this dichotomy as one between professionalization and bureaucratization. As Mechanic [1976] has pointed out, "Throughout the world there has been growing bureaucratization of medical practice, and as physicians more commonly work in organized settings they are increasingly subjected to conflicting demands and incentives." [p. 41].

The purpose of this chapter is not to review exhaustively the literature on hospital organizational theory, but rather to focus on the characteristics of professionalism and bureaucracy. Such an approach seems a plausible method of identifying those areas which are in conflict. It is hypothesized that the major differences between the two concepts will center on authority and control. Additionally, one may posit that issues of authority and control naturally lead to secondary issues concerning the power, influence, and values of each entity. Since these secondary issues will be dealt with later, this chapter is designed primarily to provide the reader with a background knowledge to facilitate the understanding of Chapter IV.

A. CHARACTERISTICS OF BUREAUCRACY

The main characteristics of a bureaucratic structure, according to Weber, are the following:

1. The regular activities required for the purpose of the organization are distributed in a fixed way as official duties.

2. The organization of offices follows the principle of hierarchy; that is, each lower office is under the control and supervision of a higher one.

3. Operations are governed by a consistent system of abstract rules and consist of the application of these rules to particular cases.

4. The ideal official conducts his office in a spirit of formalistic impersonality, without hatred or passion, and hence without affection or enthusiasm.

5. Employment in the bureaucratic organization is based on technical qualifications and is protected against arbitrary dismissal. There is a system of promotions according to seniority or to achievement, or both.

6. Experience tends universally to show that the purely bureaucratic type of administrative organization is, from a purely technical point of view, capable of attaining the highest degree of efficiency. [Blau & Meyer 1978].

Additional features have been identified as characteristics of a bureaucratic mode of organization. These include:

7. Authority and obligations are specified a priori.

8. There is a separation of policy and administrative positions.

9. The members of the bureaucracy are concerned with administrative decisions.

10. Division of labor and specialization are emphasized.
[Blau & Scott 1962].

Despite various criticisms in the literature of Weber's theory, it remains one of the most often used explanations of complex organizations. However, it should be noted that "Weber's model of a bureaucracy was based more on the way work was organized (the administration) than the actual performance of tasks." [Jones & Jones 1975, p. 183]. This difference in focus may have substantial impact in the hospital organization, where many of the tasks are physician initiated and controlled.

B. CHARACTERISTICS OF PROFESSIONALIZATION

"The sociology of professions has largely focused upon the mechanics of cohesiveness." [Bucher & Strauss 1966, p. 181]. Gross [1958] has characterized professions as those occupations that have: (1) an unstandardized product; (2) personality involvement in the occupation on the part of those who practice it; (3) a base of specialized knowledge and techniques; (4) a sense of obligation to the occupation; (5) group identity; and (6) a product or service which is significant to the society. Heydebrand [1973B] sees professionalization as a continuum ranging from in-service training to apprenticeship to formal training and the development of an occupational subculture.

Goode [1960] has stated that the "two core characteristics of a profession are a prolonged specialized training in

a body of abstract knowledge and a service orientation." [p. 903]. These core characteristics give rise to a number of secondary professional features:

1. The profession determines its own standards of education and training.
2. The student professional goes through a more far-reaching adult socialization experience than the learner in other occupations.
3. Professional practice is often legally recognized by some form of licensure.
4. Licensing and admission boards are manned by members of the profession.
5. Most legislation concerned with the profession is shaped by that profession.
6. The occupation gains in income, power, and prestige ranking, and can demand higher caliber students.
7. The practitioner is relatively free of lay evaluation and control.
8. The norms of practice enforced by the profession are more stringent than legal controls.
9. Members are more strongly identified and affiliated with the profession than are members of other occupations with theirs.
10. The profession is more likely to be a terminal occupation. Members do not care to leave it, and a higher proportion assert that if they had to do it over again they would again choose that type of work.

Some writers see professional autonomy as the essential dimension of professionalism [Engel 1969]. Freidson [1970B] suggests the main aim or characteristic of any profession is autonomy and the protection of its independence, and that three claims back up the physician's privilege of freedom from control by outsiders:

1. That there is such an unusual degree of skill and knowledge involved in professional work that nonprofessionals are not equipped to evaluate or regulate it.

2. That professionals are responsible and may be trusted to work conscientiously without supervision.

3. That the profession itself may be trusted to undertake the proper regulatory action on those rare occasions when an individual does not perform his work competently or ethically.

One widely held norm says that professional work should not, and can not, be externally regulated. This prerogative typically granted to professional practitioners reflects the degree to which they have been successful in turning their "license" into a "mandate." [Hughes 1958]. "Just as autonomy is the test of professional status, so is self-regulation the test of professional autonomy." [Freidson 1970B, p. 84].

Bucher and Strauss [1966] have pointed out that while physicians are a profession on the macro level, specialization has resulted in a decrease in their homogeneity. Physicians do not necessarily share identity and values in such areas as sense of mission, work activities, techniques, interests, and associations. Consequently, it is the segments of the medical profession that are important to study, rather than physicians in totality.

However, research on segments of the medical profession may lead to frustration. This occurs because, although the differing specialities may be readily identified, they remain

highly interdependent. Perhaps interaction with the medical profession can best be dealt with on a situational basis; concentrating on segments when communication deals with them specifically, and focusing on the medical profession as a whole when differences are liable to generate a unified physician front.

C. RELATIONSHIPS IN THE HOSPITAL SETTING

The terms "bureaucracy" and "professional" are often interpreted as contrasting entities. Freidson [1970A] has stated that:

In contrast to the negative word "bureaucracy" we have the word "profession." This word is almost always positive in its connotation, and is frequently used to present a superior alternative to bureaucracy. Unlike "bureaucracy," which is disclaimed by every organization concerned with its public relations, "profession" is claimed by virtually every occupation seeking to improve its public image. When the two terms are brought together, the discussion is almost always at the expense of bureaucracy and to the advantage of profession. The principles underlying the two are said to be antithetical, the consequences of one being malignant and the other benign. [pp. 129-130].

From the previous listings of professional and bureaucratic characteristics, it is clear that the hospital exhibits elements of both. Litwak [1961] has termed such an organization a "professional bureaucracy." Participants in this type of organization, in light of their varying goals and values, may have differing perceptions of the hospital's activities.

Georgopoulos [1972] has categorized bureaucratic and professional models in terms of tasks. More specifically, he suggests that each has different orientations in regard to targets, expected outcomes, and criteria.

TABLE IV
PROFESSIONAL/BUREAUCRATIC TASK ORIENTATIONS

Model	Target	Expected Outcome	Criterion
Professional	Client Needs	Reduction of Client Problem	Appropriateness, Principles
Bureaucratic	Institutional Integrity	Satisfaction of Job Requirements	Policies

[p. 168].

Hudson has translated bureaucratic-professional conflict into two organizational models. The first, serial structure, is analogous to a bureaucratic mode of organization (see Figure 1). It is characterized by one-dimensional communications and positional authority. The activities of individuals organized in this manner tend to be routine, incremental, and repetitive. Examples of such activities would include food preparation, bill collection, and laboratory tests. Hudson contends that the hospital governance/administration uses this model to concentrate power and implement decisions throughout the organization.

The second model can be described as a parallel structure (see Figure 2). Analogous to the professional mode of organization, it is characterized by vertical, horizontal, and cross-communication within the organization. Unlike the serial structure, where authority is vested in the position, the parallel structure stresses competence of the individual within each position. Consequently, authority is based more

Figure 1

Serial Structure

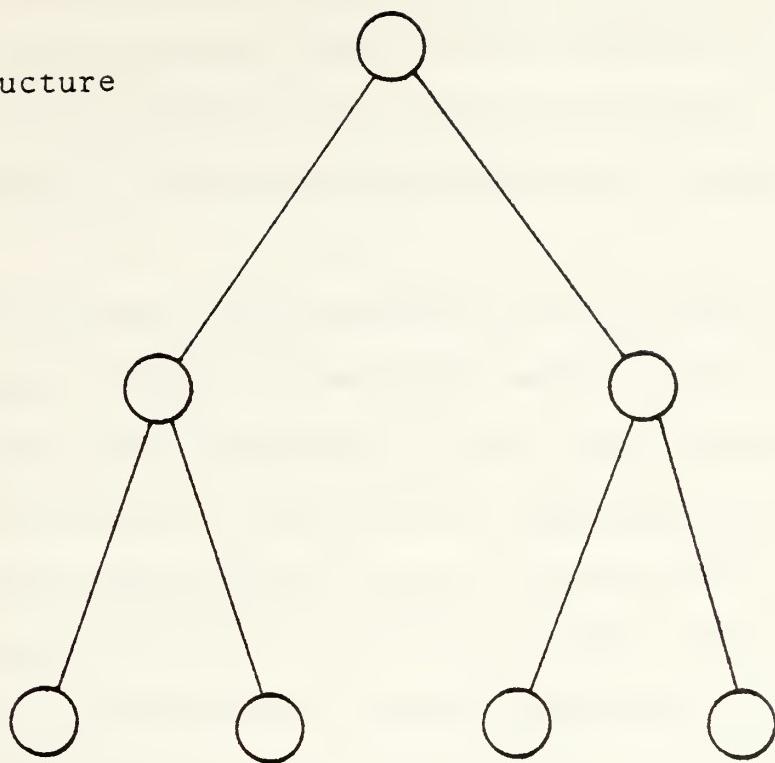
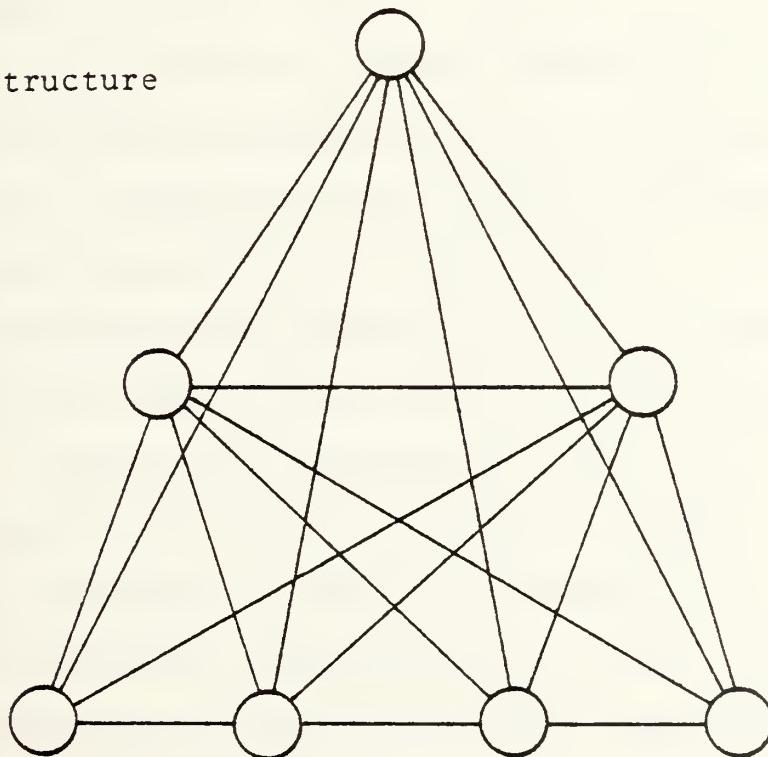


Figure 2

Parallel Structure



on proven (or perceived) expertise than location in the hierarchy. Decisions and tasks in the parallel structure tend to be unprogrammed and non-routine in nature. The most obvious example is physician-determined care to the individual patient.

Hudson contends that bureaucratic-professional discord is essentially conflict between the parallel and serial structures, the physician committed to the first and the administrator to the second. Moreover, the commitment of each is understandable since the two types of structures differently serve the needs of each. He concludes that the lesson to be learned from an analysis of the two frameworks is that organizational conflict in hospitals is primarily a result of differing social structures rather than one of personalities [Twaddle & Hessler 1977].

The hospital literature focuses primarily on the consequences of introducing professionals into a bureaucratic organization. It deals with the resultant conflict, accommodation, and coordination that takes place.

The introduction of professionals into a bureaucratic organization will have various impacts on the institution's structure. Hedley [1977] hypothesizes that, in relation to more bureaucratic forms of organization, professionalism will cause: (1) a decrease in vertical communication; (2) an increase in horizontal communication; and (3) a greater integration between the design and execution components of work.

Kornhauser's study identified four areas of conflict between bureaucratic and professional organization: (1) goals; (2) types of control; (3) incentives for professional involvement; and (4) issues over influence and authority [Green 1975]. Some have suggested that the appointment of a medical director may reduce the conflict between professional and administrative organizational roles and hierarchies, but at the expense of the clarity of definition of the chief executive officer. In other words, organizational conflict is transformed into role conflict between the administrator and the medical director [Heydebrand 1973B].

Professionals experience two types of organizational conflict:

1. Conflict between professional and bureaucratic positions and hierarchies (or between bureaucratic and collegial authority structures.)
2. Role strain and conflict within those status-roles requiring the performance of both professional-technical and administrative-supervisory work functions.

"Hierarchy" is a term often associated with bureaucracy, but seldom found in a detailing of professional features. However, while other sectors of the hospital strive for the characteristics of professionalism, the physician remains dominant. Only he has the authority to direct and control the actions of others in prescribing medical care while remaining relatively free of formal direction and evaluation. Thus, within the hospital there exists a hierarchy of

institutionalized expertise. As Freidson [1970A] has stated, "Expertise establishes office and hierarchy analogous to that of bureaucracy." [p. 157].

In her study of the control patterns among a group of hospital physicians, Goss [1966] found that doctors in a hierarchical position within the organization exercised "authority" with respect to such administrative matters as the scheduling of patients, but offered only "advice" in the area of patient care. Additionally, Goss found that dual authority is both established and maintained by the segregation of administrative decisions from those areas where professional judgement is considered necessary. When a decision is deemed administrative, enforcement by the authority of office is accepted. Conversely, when a decision is considered medical in nature, authority lies with the individual professional.

Goss's assertions seem to imply a clear-cut separation between medical and administrative decisions. Moreover, it implies a convergence of professional and bureaucratic modes of organization. However, "convergence presupposes adequate coordination and requires partial subordination of personal interests to collective concerns, mutual trust and understanding, and continuous voluntary cooperation, adjustment, and readjustment by all involved." [Georgopoulos 1972].

Much of the literature focuses on cooperation and coordination as the cornerstones needed to solve conflict in the hospital. Heydebrand suggests that: "Professionalization

constitutes what could be called a nonbureaucratic mode of coordination." [Heydebrand 1973B, p. 27]. However, he also points out that lateral interaction and communication may increase conflict and competition as well as cooperation.

One significant characteristic of the hospital organization is the distinction between authority and control based on incumbency in a position (bureaucratic) and control based on technical competence (professional). In the bureaucratic mode, authority is legalistic in nature and is imparted to the worker through a hierarchical rank structure. In the professional mode, authority accrues to an individual in direct proportion to his expertise in a specialized body of knowledge. As expected, since authority evolves from different sources, so does the manner of control. Control in the bureaucracy rests with an organizationally-directed supervisor, while control of professionals is accomplished by the individual himself or through consultation and peer review with other professional colleagues. "In short, the conflict between professional and bureaucratic decisions is of a jurisdictional nature and typically involves overlapping or conflicting areas of competence." [Heydebrand 1973B, p. 85].

Engel [1970] has investigated the often published claim that bureaucratic organization limits professional autonomy. If such allegations are true, one should find an inverse relationship. Engel surveyed physicians in highly bureaucratic, moderately bureaucratic, and nonbureaucratic settings as to their perception of professional autonomy. The results

are detailed in Table V. As indicated, perceptions of professional autonomy were highest in the moderately bureaucratic setting. Engel attributes this finding to the fact that while highly bureaucratic organizations may inhibit the physician, he must rely heavily on the social and physical features which they provide. Thus, the physician uses the bureaucracy to provide him with funds, equipment, technical personnel, and other physical facilities. Since these organizational attributes facilitate the physician's performance, but do not limit his practice of medicine, the physician views the moderately bureaucratic organization as necessary for professional autonomy. Engel's conclusion is that it is not bureaucracy per se but the degree of bureaucracy that can limit professional autonomy.

TABLE V
PHYSICIAN PERCEPTIONS OF PROFESSIONAL AUTONOMY

Bureaucracy	Professional Autonomy			N
	Low %	Medium %	High %	
Low	40.8	35.5	23.7	152
Medium	14.0	34.8	51.1	221
High	46.2	32.1	21.8	156

Hall [1973] has hypothesized that in some instances the relationship between bureaucracy and professionalization



is positive. For example, Weber's division of labor may be very compatible with the specialization that occurs among physicians within the hospital. Likewise, bureaucratic promotions based on technical competence may be consistent with the values of professionals. On the negative side, Hall believes that hierarchical authority and extensive organizational rules and regulations are antithetical to physicians. Hall concludes that "an equilibrium may exist between the levels of professionalization and bureaucratization in the sense that a particular level of professionalization may require a certain level of bureaucratization to maintain social control. Too little bureaucratization may lead to too many undefined operational areas if the profession itself has not developed operational standards for these areas." [p. 506]. Consequently, a portion of the organizational dysfunctionalism in hospitals may be the result of professional organization rather than bureaucratic characteristics [Freidson 1970A].

Lentz [1957] has suggested the interesting possibility that "the split in authority works to the benefit of the patients since it sets up a series of checks and balances." [p. 460]. In a general sense, Lentz may be correct. Good medical care is dependent on a structure which will provide enough stability that the routine aspects of care can be efficiently carried out, coupled with enough flexibility that special procedures can be readily instituted for handling non-routine patient needs.

Hedley [1977] has proposed that: "There is no necessary conflict between professional and bureaucratic modes of work organization, provided that appropriate areas of organizational jurisdiction are specified." [p. 61]. However, Goss's review of recent physician/hospital studies suggests that current external and internal cost control mechanisms have done little to decrease physician autonomy or dominance. Likewise, costs have not decreased appreciably.

D. SUMMARY

The modern hospital is regarded by sociologists as an example of an institution exhibiting many of the characteristics of a complex organization, including elements of both professionalism and bureaucracy. Since neither organizational theory is wholly or exclusively applicable to the hospital setting, this chapter has attempted to describe the relationships as well as to isolate both similar and conflicting characteristics.

Some writers see the hospital's dual line of authority "as a structural mechanism for assuring that managerial and economic criteria remain subordinate to clinical criteria of efficiency in patient care." [Goss, et al. 1977, p. 4]. Others contend that "professional status is one of the political bargaining resources which groups might use in the pursuit of their aims." [Green 1975].

An attempt has been made to discuss both bureaucracy and professionalism on an objective basis, without either positive

or negative connotations. The primary areas of conflict seem to lie in the concepts of organizational authority and control. On the one hand, bureaucracy stresses hierarchical arrangements and formal rules and regulations. Conversely, professionalism emphasizes personal autonomy and self-regulation. When decisions within the hospital are clearly defined and understood to be either medical or administrative in nature, problems appear to be minimal. However, when decisions fall within the range of authority, expertise, and control claimed by both the physician and the institution, difficulties are inevitable. As pointed out by Heydebrand and Noell [1973]:

Where interests based on considerations of profit or power are at stake, or in collision with professional judgement based on technical expertise, the knowledge and autonomy of professionals will tend to be subordinated to bureaucratic authority. Professionals, in turn, will assert themselves by insisting either on the moral superiority of their position (the welfare of the patient), or they will mobilize countervailing power by controlling access to knowledge. In other words, professional/bureaucratic conflict manifests itself in the opposition of interests concerning expansion, restriction, or application of resources, and over the right to define organizational realities. [p. 313].

Consequently, disputes over authority and control are likely to always be present in the hospital. Much of the literature suggests negotiation and cooperation as remedies for these difficulties. However, these terms are prescriptions for organizational discord, not descriptive of how coordination is realized. Authority and control relationships within the hospital are not static. Rather, they are

constantly undergoing change as the power, influence, and values of the principal organizational players are altered. In the next chapter, we will analyze these pressures within the organization.

IV. POWER AND INFLUENCE BASES

It is hypothesized that the structural characteristics exhibited in the "professional bureaucracy" will have a marked effect on the social structure of the hospital, and consequently, on the interactions within the institution. In a hospital the "general goal of the organization specifies an area of activity instead of a specific activity and therefore is subject to wide differences in specific interpretations." [Thompson & Bates 1957, p. 329]. Assuming the truth of this statement, one could expect that a lack of specific objectives will lead to disagreements over choice of tasks to be performed, resource allocation, and the distribution of authority and status.

Bucher and Stelling [1969] have stated that the "question of which persons and groups influence the setting of goals and practices in the hospital points to a complex and probably fluid phenomenon. Power to determine policy is not clearly located in specific positions. It is more diffuse, and the locus and balance of power often shifts in response to different issues and as different persons and groups move through the organization." [p. 11].

As Ginzberg [1977] has asserted:

With regard to decision-making mechanisms, it is important to note that although governance can alter the flow of funds into the system, select the targets to which they are directed, influence the production

and allocation of health manpower, and promulgate rules for quality assurance, the effective transformation of the health care delivery system depends on the behavior of individuals and groups in specific locations. [p. 213].

One of the major underlying themes of the hospital literature is the need for integration between clinical and administrative decision-making. Shortell [1974] believes that the key to such integration lies in the relationship of authority and power in the institution. He defines power as influence accruing to the individual, while authority is derived from the organization.

The purpose of this chapter is to examine some of the power and influence bases that are used by trustees, administrators, and physicians. As hospital costs rise and funds become scarce, power and influence increase in importance as determinants of resource allocation. When the environment of an organization has plentiful resources, institutional conflict tends to be minimized. There are sufficient monies, manpower, and equipment to satisfy all requests. However, as resources dwindle, competition for these resources becomes intensified.

With the foundation of bureaucratic and professional organizational characteristics in mind, this chapter focuses on the types and degrees of influence that various members of the hospital can exert in justifying their claim for authority, control, and resources.

A. CONTROL AND CONFLICT

"Only the uninitiated believe that the organizational chart shows where the power actually lies in a specific hospital." [Viguers 1978, p. 40].

The hospital has been described as an organization consisting of multiple, and often conflicting, goals. It is hypothesized that this characteristic is derived from corresponding incongruencies in individual interests, values, powers, and influences. For most hospitals, perhaps the determination of goals is a function of the bargaining processes among the more powerful coalitions. [Cyert & March 1973].

"While formal rules and protocols exist, what actually takes place in hospitals between administrators, medical staff, nursing staff, other professionals, semi-professionals and nonprofessionals, and clients is a matter of negotiation (overt) and influence (covert negotiation)." [Croog & Ver Steeg 1972, p. 293]. Gordon [1964] contends that:

The elements that are different in the voluntary hospital organization stem not primarily from the structure, the psychology, the human relations, and so forth. They stem from the power relationships, the control relationships and the alternatives available to each group in what can best be described as a negotiated relationship and one constantly subject to renegotiation. They stem out of the alternative means of leverage and the amount of power behind that leverage that is available to each party in the negotiation. [p. 67].

Perrow [1963] has traced the history of organizational control in hospitals. He found that hospitals have proceeded through four stages:

1. Trustee domination had its roots in the tradition of charity hospitals to serve the poor.
2. Medical domination developed as medical knowledge increased in quantity and complexity.
3. Administrative challenge was the result of increasing needs for sound management practices and cost control.
4. Multiple leadership resulted from the effects of a power struggle between the three groups. This proved relatively ineffective in terms of long-range planning.

As Perrow indicates, the hospital is now in stage four. Thus, power struggles are seen as one of the most important characteristics of the modern institution. The outcomes of these struggles are not limited to present-day consequences because "when decision makers in an organization allocate resources, they limit their future alternatives." [White 1974, p. 369].

One could argue that Perrow's "multiple leadership" model is a redundancy; one needs to go no further than the introduction of stage three to realize that three separate entities are intervening within the hospital. Moreover, one may posit that the primary conflict is occurring between "medical domination" and "administrative challenge." Certainly, if stage three was, in actuality, "administrative domination," physicians' power would be subordinate to that of hospital management.

Before proceeding further, perhaps the physician's relationships to the hospital should be explicitly detailed. Guest [1972] summarizes these relationships as follows:

1. The doctor was and is officially a "guest" of the institution, but his privileges as a "guest" are being limited by increasing pressures to conform to certain organizational constraints of the medical staff, the hospital, and third party agreements.

2. The doctor is the "independent professional," but he is becoming increasingly interdependent in his relationship to his colleagues, other professionals, the administrator, and the governing authority of the institution.

3. The doctor makes his own financial contractual arrangements with his clients but these arrangements are to an increasing extent preestablished in schedules set up under health insurance, Medicare, Medicaid, and other third-party agreements.

4. The doctor has a fundamental right to minister to his client, the patient, but the responsibility for "total patient treatment" appears to be shifting toward greater involvement of other professionals, including administrators.

5. The knowledge of clinical practice is "owned" by the doctor, but the technical tools of his practice are owned in large degree by the institution which gives him the privilege to practice. Even the doctor's clinical knowledge is being supplemented by specialized knowledge of other, nonmedical, members of the institution.

6. The doctor's role as a member of the hospital organization, as distinguished from his purely professional role, is being made increasingly explicit in bylaws of the medical

staff and in written agreements with administrators, governing boards, and outside parties of interest.

As Guest clearly indicates, physician and hospital interaction is highly interdependent. However, interdependence is not necessarily compatible with goal congruence. And even in those cases where it may be, the hospital and physician may be at odds on the means of reaching a particular organizational objective. This is especially true in medical care where institutional goals remain vague and largely unmeasurable.

White [1974] suggests two methods for individuals in organizations to realize their goals:

1. By collective decision-making on the allocation of resources.
2. By the utilization of the resources themselves.

While the type and degree of control over the first is primarily determined by status and influence within the organization, White observes that all members of the institution make decisions that affect, in some sense, resource utilization. One should note the relationship between the two. It is of a serial rather than concurrent nature. "Utilization of scarce resources results from a series of allocative decisions." [p. 367]. For example, excessive utilization of a particular piece of laboratory equipment cannot occur unless a previous affirmative decision on the purchase of the equipment has been made. This appears to be the rationale behind certificate of need legislation now in effect.

Although this study deals primarily with the internal workings of the hospital, it should be remembered that external controls, such as certificate of need laws, usually result from a perceived need to alter the way the hospital operates. For example, specialization and division of labor, previously discussed under professional and bureaucratic characteristics, are seen by some as stimuli for external control. Rushing [1976] observes that:

An increase in differentiation makes the actions of personnel more difficult to anticipate; conflicting interests emerge and social disorganization is apt to ensue. The resulting strain may lead to a generalized demand throughout the system for more planning, the development of more well-defined procedures and regulations, and the establishment of agencies to insure that procedures and regulations are adhered to. [p. 679].

Georgopoulos [1972] suggests that an individual's propensity to behave in a manner consistent with organizational objectives is dependent on two factors: (1) his expectation that performing an activity will lead to certain consequences, or desired "payoffs"; and (2) the relative value or attractiveness for the individual of the outcomes likely to result from performing that activity. To the extent that an individual perceives the outcomes as favorable, cooperation will be forthcoming. However, if payoffs are deemed negative, conflict will ensue. As each individual strives to attain the greatest positive outcome possible, interpersonal conflict will result.

Walton has separated interpersonal conflict into two camps:

1. Interpersonal disagreements over substantive issues, such as policies and practices.
2. Interpersonal antagonisms when personal and emotional differences arise between interdependent human beings. [Schulz & Johnson 1971].

Gamson notes that "there may come a time in a conflict when the perceived issues become transformed from matters of substance (over policies, resource allocations, etc.) to the completely different issue of the right of one of the parties to make decisions on the substantive question. This is what is known as a power struggle." [Murray 1974, p. 45].

Gordon's [1964] study of hospital organization suggests that while many of the characteristics found in hospitals are similar to those found in business and public institutions, one feature appears to be unique. Although the hospital exists primarily as a vehicle for providing health care, the corporate entity is not allowed, either ethically or legally, to practice medicine. This privilege belongs solely to the physicians. This differentiation is not a semantic exercise but rather the crux of the issue concerning types and degrees of professional control. Gordon concludes that: "The distinguishing characteristic of hospital organization is not dual authority. Nor is it an academic debate on who practices medicine. Instead, it is the freedom of the doctor from control by unlicensed persons over whatever may fall or may be defined as falling within the area of his professional functions." [pp. 63-65].

Etzioni [1959] has suggested that line and staff relationships in the professional bureaucracy are reversed from those normally found in industry. The managers of the hospital provide the supporting services needed to reach institutional goals, but the physicians carry out the actual goal activity.

One major problem faced by hospital administrators is their lack of control over most costs and expenditures. These are determined by the activities of the medical staff who admit patients, order tests and therapeutic procedures, and try to directly influence policies of the hospital. Hence, the administrator tends to view the medical staff with a jaundiced eye. On the other hand, physicians tend to focus on the unique features of each patient. They want the hospital to provide the necessary support services when they are needed and with a minimum of red tape. They often are intolerant of many of the routines regarded as essential by the administrator and frequently perceive the hospital as frustrating therapy. "The professional dimension operates primarily in a dynamic task environment; the nonprofessional dimension operates in a relatively stable task environment reflecting the nature of its responsibilities." [Ewell 1976, p. 21].

Etzioni [1959] explains this organizational conflict in terms of roles. "The role of the expert is to create and institutionalize knowledge. The role of the manager is to

integrate organizational systems or subsystems from the point of view of institutional goals and needs." Consequently, physicians exhibit primary allegiance to their professional work while administrators are more committed to the organization [p. 45]. Others see the physician/hospital dichotomy as a separation of focus. "The split in authority leads to problems of goal conflict, mostly between the efforts of the medical staff to promote care on an individual basis while the administration seeks to promote patient care in the least expensive way." [Coe 1970, p. 317].

Viguers [1978] concludes that power and influence within the hospital rests with those individuals who control financial resources, medical resources, and communications. Such control can be derived from either the formal or informal organization. The following pages attempt to move beyond generalities to identify the specific leverages each individual or group in the hospital may possess.

B. TRUSTEE INFLUENCE

Power is likely to be manifested in the kinds of decisions the hospital makes. Conversely, if one looks at the types of decisions made by physicians, governing boards, medical directors, and administrators, the degree of power or authority held by each group may be implicitly derived. LeRocker and Howard studied the policy decisions of trustees in 18 New York State hospitals. They found that 50 percent

of the decisions of hospital boards were in the area of finance and physical plant, 24 percent in the area of personnel, 7 percent in public relations, 6 percent in hospital organization, 5 percent in education, and only 2 percent in patient care policy [Kovner 1974].

It appears that trustees are able to influence decisions that are comparable with those made in private industry, i.e., financial and personnel judgements. Conversely, decisions peculiar to hospital organization appear to be outside the governing board's province. Ewell [1976] argues that hospital trustees, because of the part-time nature of their responsibilities and lack of health care experience, are hesitant to countermand the administrator's decisions involving organizational structure. "The board's traditional orientation is toward the financial and legal aspects of hospital operations." [p. 22].

In relationships with the administrator, the board holds the authority to hire and fire. However, in carrying out the management functions of the hospital, perceptions may vary as to the trustees' degree of control and influence. Kaluzny and Veney [1972] conducted a study on how trustee participation in the hospital is perceived. Both administrators and trustees were asked to rate the degree of trustee participation in varying hospital decisions. The results are detailed in Table VI.

TABLE VI
TRUSTEE PARTICIPATION AS VIEWED BY
TRUSTEES AND ADMINISTRATORS

Areas of Trustee participation	Amount of trustee participation as viewed by:	
	Administrators	Trustees
Allocation of income	Considerable	Some
Adoption of new programs & services	Considerable	Some
Development of formal affiliations	Considerable	Some or none
Appointment & promotion of administrative personnel	Some	Some
Appointment of medical staff members	Considerable	Some or none
Long-range planning of new hospital services	Considerable	Considerable or none

[p. 52].

These findings seem to indicate that administrators perceive greater participation and influence by trustees than do the trustees themselves.

In a somewhat conflicting study, Kovner [1974] surveyed 506 trustees in the greater Philadelphia area as to their power to set institutional goals. He found that 92 percent of the board members perceived that the board exclusively or primarily established objectives, strategies, and broad policies. However, in the same survey, 97 percent of the

trustees said that the hospital administrator determined to at least some extent which policy issues the board discussed. Thus, institutional control and influence by the governing board over hospital decisions seems to be contingent on trustee/administrator communication.

Some writers contend that power accrues to individual trustees rather than to the governing board in general. Zald [1969], commenting about the power and influence of boards and directors, stated that: "The power of board members relates to their service on and control of key committees and the extent to which other members and the management find it necessary to be bound by their perspectives and ideas." [p. 98]. Unfortunately, Zald failed to specify which committees have the most power.

The formal authority of trustees over physicians is similar to that exercised over administrators. Appointment to the medical staff, the granting of privileges, and the approval of medical staff bylaws all directly affect the status, professional development, and earnings of the individual physician. Significantly, all of these factors are within the province of the governing board. Thus, the board can exercise considerable influence on a physician's potential achievements. It should be noted that this influence may be tempered or enhanced by the institutional alternatives available to the physician. In large metropolitan areas, physicians are often staff members of two or more hospitals. Hence, the power of each individual hospital board is

diluted, and sanctions against physicians may be less effective.

Trustee leverage in the hospital seems to be primarily limited to approving and terminating the employment of physicians and administrators. Any additional influence on behalf of the board is largely dependent on its collective knowledge of the institution and how well communication is established with its members. Gordon [1964] concludes that: "On a day-to-day basis, the voluntary hospital corporation and its agents have no legal or organizational means of controlling the service that the hospital has been set up to render." [p. 72].

C. ADMINISTRATIVE INFLUENCE

Gordon observes that:

The practice of medicine is engaged in, not by the hospital, but by doctors. The practice of medicine, if it is to be controlled, under law, must be controlled close to the source of information and competency, not by the board and the administrator but by licensed doctors. The board and the administration must have: (1) the organizational means, and (2) the interpersonal approach to hold the doctors accountable for such control. Neither is enough alone. [p. 65].

However, some authors believe that state-of-the-art managerial interventions are not likely to be successful in the hospital situation because hospitals do not exhibit many of the formal characteristics found in industrial firms [Weisbord 1976]. Goss [1966] points out that, in the hospital, to a greater extent than other social institutions,

norms and values may set the real limits to supervisory control as opposed to the official limits.

Georgopoulos and Mann [1962] have stated that the administration's influence is a function of the governing board's delegation to him. On the other hand, physicians derive influence from their expertise, prestige, and power among patients and the community. The authors conclude that the administrator's influence is the stronger of the two.

As cited previously, the increasing number of hospitals with a "chief executive officer" title rather than "administrator" or "superintendent," may be seen as a method for increasing the administrator's influence and prestige.

Although changing the title may increase the status of the individual inside the organization, some writers have contended that the major importance of the change is to project the status of the position to outside people [Wren & Hilgers 1974].

Previous mention was also made of communications between boards and administrators. Similar studies have been conducted on physician-administrator interaction. To determine which elements of the medical staff communicated most frequently with the administrator, Gottlieb [1975] designed a study around the organizational status of physicians. He assigned medical staff to one of three categories.

1. High Organizational Status: Medical Director, Chief of Staff, officers of the medical staff, members of the medical staff executive committee, and clinical department heads.

2. Medium Organizational Status: Departmental educational chiefs, and in-house specialists.
3. Low Organizational Status: None of the above.

It should be noted that all of the hospitals studied were in excess of 500 beds so that a representative medical staff could be surveyed. Gottlieb determined that, with a few exceptions, administrator interaction was confined to those physicians with high organizational status. This would seem to indicate that the administrator uses his authority and influence from a hierarchical perspective, working through medical staff representatives rather than the medical staff as a whole.

Perrow's "multiple leadership" model was discussed earlier. It was hypothesized that the principal power struggles occur between administrators and medical staff. The hospital literature tends to back up this assertion; the great preponderance of articles dealing with administrative power contrast physician-administrator influences within the hospital. For example, Bates and White [1961] conducted a study of thirteen upstate New York hospitals. They surveyed board members, administrators, and physicians as to what authority each of them should have in making various hospital decisions. The questionnaire consisted of hypothetical situations arising in the institution. They found that some areas, such as the medical staff's prerogative to determine patient treatment, were generally agreed upon. In other areas, such as patient scheduling, more than one group perceived themselves

as preeminent. The major differences in the perception of authority occurred between administrators and physicians.

Wilson [1966], in discussing changes in the traditional roles within the hospital, has shown that the rise of hospital administration to the status of a profession has resulted in strains and in readjustments in the nature of work and authority relationships between doctors and administrators. "In business, prestige and power normally go to the administrative group, the paper workers who make the plans and initiate the activities of others. Production workers have lower status. In the hospital the honor and glory go to the production worker, namely, the doctors." [Lentz 1957, p. 460].

Some have suggested that the administrator is dependent upon the cooperation of the medical staff for his power and when this support is lacking the administrator will be ineffective [Viguers 1978]. It appears that when medical staff-administrator differences become intolerable, administrators are expendable while the medical staff is not. Thus, "The relative power of the administrator will be increased to the extent that he influences the outcome of who occupies, or does not occupy, key positions in the medical staff hierarchy and on medical staff committees." [Kovner 1978, p. 89].

O'Connor [1978] believes that the power of administrators has increased in direct proportion to the number of outside agencies that the hospital must deal with. He assumes that administrators and regulatory agencies share the same concern

with cost control, and therefore the chief executive can ally himself with a governmental powerbase in his conflicts with the medical staff. While cost control is seen as a legitimate concern of the administrator, he lacks the authority to direct physicians to order fewer tests and perform fewer procedures. Rather, the administrator can attempt to influence the medical staff to develop and implement guidelines for controlling these functions in the hospital. Consequently, success rests more on the administrator's influence than on hierarchical relationships. Kovner [1978] concludes that the administrator's only formal authority and influence on cost control is, at least potentially, exercised in the budgetary process.

Green's [1975] study revealed that much of the conflict in hospitals occurs between subsets of physicians rather than between physicians and administrators. However, the administrator could not remain a disinterested bystander. He usually found himself courted by both opposing sides and forced to take a stand. Consequently, he invariably found himself allied with some physicians and opposed to others. Therefore, the administrator may be viewed as functioning in a "boundary role," one that arbitrates various conflicts within the hospital [Schulz & Johnson 1971].

Etzioni [1975] stresses that the power of the administrator is mostly determined by the quantity of influence that other parties in the hospital can bring to bear upon him. Consequently, to understand the administrator's

function in the hospital depends on the ability to identify the "coefficients of strength of the various groups" [p. 281]. It is hypothesized that the medical staff is the most powerful of these groups. For a discussion of their influences, we turn to the following section.

D. PROFESSIONAL LEVERAGE

According to Green: "Doctors have been crucially involved in the determination of the structure and their position in the organization. They lie in the adjustable bed which they helped to make." [p. 124].

Specialized clinical procedures are no longer simply a matter of a physician deciding on a new course of drug therapy or of performing a surgical operation in a different manner. What was once a physician's exclusive decision now becomes a matter requiring building changes, training of personnel, and a considerable investment in new equipment. [Johnson 1970, p. 21].

Much of the professional status of the physician is independent of the hospital. In general, the individual physician does not need a hospital to work with and through, but rather to work in. If hospitals could not provide the means for the medical staff to practice medicine, physicians would have no need of them [Bennett 1971].

Even now, a significant portion of the physician's work is accomplished outside of the hospital, where professional autonomy remains largely undiminished.

Mayhew [1971] has written that: "Physicians are an outside agency from the standpoint of hospital organization and are the gatekeepers who regulate the volume of hospital

activity." [p. 28]. Perhaps the appropriate view of the hospital-physician relationship is that the hospital is part of the physician's practice rather than the physician being a part of the hospital [Freidson 1970B].

The charisma of physicians has been generalized to many situations in the hospital setting in which the rational authority of the administration is more appropriate, thus making the medical staff a very powerful and influential group in the hospital [Georgopoulos & Mann 1962]. Physicians often argue that: "Even when general scientific knowledge may be available, the mere fact of individual variability poses a constant problem for assessment that emphasizes the necessity for personal first hand examination of every individual case and the difficulty of disposition on some formal, abstract scientific basis." [Freidson 1970B, p. 164].

Reiff [1974] believes that "the basis of professional power is not knowledge itself, but the control of knowledge." However, in addition to control of professional knowledge, he argues that physicians also expropriate knowledge on nonprofessional matters. "This includes large segments of intuition, common sense, and cultural and moral values. They aggrandize nonprofessional knowledge, giving it the trappings of professional knowledge." Consequently, the influence given to physicians is greater than is warranted by their medical proficiency [pp. 451-453]. As Weisbord [1976] has noted, "It is not necessary to demonstrate

competence in working with others, nor an understanding of organizational complexity to achieve status in medicine.

Once technical competence is certified, all else is assumed."
[p. 25].

Freidson [1970B] hypothesizes that the physician's power and influence in the hospital is directly proportional to his ability to justify, rightly or wrongly, a critical emergency. At its ultimate, this tactic is known as the "Golden Scope Syndrome." The physician marches into the administrator's office and informs him that: "Unless you purchase the new model golden scope immediately, 13 people will die needlessly by the end of the month." Thus, for example, surgeons and cardiologists have more power than dermatologists and pathologists.

The physician's claim to independence may be reinforced through the traditional "physician-patient" relationship. For many years the vast majority of medical care was provided in the physician's home or office. Responsibility was imbedded primarily in the doctor's duty to help the patient. This was the first consideration and nothing was permitted to intervene. As physicians have moved into the hospital, they have attempted to retain this basic relationship. The institution, with its rules and regulations, is seen as secondary in importance [Guest 1972].

It appears from the literature that, although the physician may not always be able to control the terms of

his work, he is free to control the content. As Freidson [1970A] has pointed out: "It seems to be assumed that technical expertise, unlike 'arbitrary' administrative authority, is in some way neutrally functional and therefore so self-evidently true as to automatically produce cooperation or obedience in others as well as the efficient attainment of ends." [p. 130].

Physicians increase their power within the organization by retaining the right of self-evaluation. Many of the recent legislative and regulatory mechanisms have focused on this control. "The presumption that the interests of the providers are synonymous with those of the recipients of medical care no longer underlies new legislation." [O'Connor 1978, p. 276]. Whether or not such legislation improves quality of care or prevents waste of resources is debatable. It seems that evaluation of care has merely moved from an individual basis to a collective one. Physicians are not likely to question an individual practitioner's decisions except in extreme cases. Conversely, physicians are thought to be reluctant to voice disagreement against any decision that is supported by doctors in general. Evans [1977] has termed this characteristic the "huddle complex." [p. 32].

One study indicated that physicians in a hierarchical position within the institution identified two supervisory relationships: (1) the right to make decisions; and (2)

the right to give advice. The first consisted of those decisions that were administrative in nature while the second related to medical care choices. The investigator concluded that "the latter indirect process represents an institutionalized form of exercising influence; advice was given which, according to the norms of the physicians, might legitimately be rejected by the recipients. In contrast, the direct process represents the exercise of authority; supervisory decisions were made which, however phrased, ordinarily could not be rejected legitimately by those whose actions they concerned." [Goss 1966, pp. 425-429]. Freidson and Rhea [1972] conclude that, as far as peer review is concerned, "technical performance by physicians goes generally unobserved, and, even if observed, uncommunicated, and, even if communicated, uncontrolled." [p. 196].

The preceding paragraphs have focused on the power of physicians in terms of their control of knowledge, both professional and nonprofessional, and their right of self-evaluation. These influence bases are supported by circumstances external to the hospital organization. The most notable of these external forces is the American Medical Association (AMA). The AMA provides physicians with a nationally oriented power block to influence legislation. Since the AMA is structured through state medical organizations, an individual hospital has great difficulty in countering its influence. Moreover, the AMA is heavily involved in overseeing licensure of physicians, which limits access to the profession. On the

hospital level, such control is manifested by a sociological phenomenon known as "blocked mobility." That is, individuals cannot be promoted from one occupational level to another without undergoing further formal training outside the organization [Smith 1955]. Consequently, physicians are somewhat protected from intrusions of differing values and goals by other members of the institution.

Organizationally, physicians are now occupying some positions outside their traditional medical staff orientation. Some writers see the physician's increasing acceptance on the governing board as a merging of institutional interests. The physician is perceived as a trustee first and a doctor second. However, others have pointed out that the physician wants membership on the governing board because he has a fundamental distrust of both the governing board and the administrator. Thus, membership is sought to protect their own interests [Schulz & Johnson 1976]. Mansfield's [1972B] study indicated that administrators were overwhelmingly pleased (93.3%) with physician membership on governing boards. The board itself was pleased in 88.6% of the responses while the medical staff was least pleased (66.5%). Significantly, the medical staff's displeasure resulted from perceived under-representation on the board.

Likewise, the position of medical director is perceived from various viewpoints. While a "company man" on the organizational chart, the degree to which he can integrate professional and administrative functions is problematic.

Perhaps the medical director position has evolved from the belief that physicians understand each other and that they will accept from one of their peers what they would not accept from an outsider.

In summary, one is likely to find agreement with the proposition that hospitals exist to serve patients. However, patients are not able to request hospital services on their own initiative. The decision to hospitalize and draw on the institution's resources belongs to the physician. Consequently, administrators and governing boards must concentrate on satisfying physicians first and patients second. Perhaps the physician's right to determine access to the hospital is his most important power of all.

E. SUMMARY

Power is the ability to make or influence important decisions. This chapter has described the types and degrees of leverage that are possessed by governing boards, administrators, and physicians. Although recognizing that the determination of power and authority relationships in a particular institution is empirical in nature, many of the issues discussed are applicable to a majority of hospitals.

The significant influence bases within the hospital can be summarized as follows:

1. Governing Boards
 - a. Legitimate authority over the institution.
 - b. Expertise on financial and legal affairs.
 - c. Hire and fire the administrator.

d. Appoint physicians to staff and approve privileges.

2. Administrator

- a. Control over information flows.
- b. Control over support services, including both nonprofessional personnel and equipment.
- c. Knowledge of budgetary techniques and processes.
- d. Familiarity with outside agencies.
- e. Some ability to influence which physicians hold positions in the medical staff hierarchy.

3. Physicians

- a. Source of patients.
- b. Professional knowledge and technical competence.
- c. Ability to define emergencies.
- d. Institutionalization of sacred patient-physician relationship.
- e. Professional control of performance evaluation.
- f. Initiator of resource utilization.
- g. AMA affiliation.
- h. Membership on governing boards. .

One may have noted the absence of medical directors in the above listing. No slight was intended. The power and influence of directors has not been broached in current hospital literature. The few articles which have dealt with the director tend to focus on cooperation and coordination with the administrator. Perhaps the relative newness of the position in the hospital accounts for the paucity of information. At any rate, a medical director's power in a particular hospital is no doubt ascertainable, but to attempt a generalization of his influence is not possible.

V. HOSPITAL GOALS

In order to study the decision-making process in the hospital, it is first necessary to examine the purposes and goals of the hospital and to determine who has the most influence in the establishment of them. The approach used in the research for this chapter was to review hospital literature that dealt with purposes, goals, and objectives of hospitals and those who work in them. The majority of the literature was very general in nature and leads to the conclusion that health care goals tend to be vague, unmeasurable, and lacking in specificity. This chapter is an attempt to review the many different viewpoints on health care and hospital goals and reach some conclusions on the goals which are motivating the decision-makers in our hospitals.

Everyone employed in a health care organization needs something to believe in, some specific purposes and goals to work for. Because of the complex, multidisciplinary characteristics of a hospital, it is imperative that the efforts of its people be directed toward goals, rather than functions [Bennett 1976]. What are the goals of a hospital and by what or whom are they set? Anthony and Herzlinger [1975] state that a goal is a "... statement of intended output in the broadest terms." [p. 133]. Since hospital goals cannot usually be measured quantitatively, it is often difficult to determine whether the intended output was actually achieved.

Therefore, goals are normally used more as a statement of purpose or aims, to establish relative priorities of the organization, and to provide general guidance as to the strategy that the organization is expected to follow.

Specific goals supply the criteria by means of which the organization's structure may be rationally designed: they specify what tasks are to be performed, what kinds of personnel are to be hired, and how resources are to be allocated among participants. That virtually every organization theorist insists on the importance of specific goals as a defining criterion of organizations is not surprising. However, the goals of most professional organizations, such as medical institutions or universities, are notoriously lacking in precision. A major difficulty, as indicated by Hall [1973], is that the measurement of effectiveness against goals may not recognize the presence of multiple, and frequently conflicting, goals within organizations. Thus, effectiveness in meeting one goal may, in fact, lead to ineffectiveness relative to other goals. This is more likely to occur in an organization like a hospital that is multi-purpose in orientation.

Many factors affect the ability of an organization to achieve its goals. Internally there may be a lack of harmony; members of the institution may be unclear as to its goals; there may be conflicts between goals; or there may be other and numerous internal forces. On the other hand, environmental conditions may also influence effectiveness.

Competition with other organizations, changing societal definitions of goals, shifts in the legitimacy granted to an institution, and general economic and cultural conditions can influence the organization's attainment of objectives directly or through their influence on support [Elling & Halebsky 1961].

According to Simon [1964], it is doubtful that decisions are generally directed toward achieving a goal. It is easier, and clearer, to view decisions as being concerned with discovering courses of action that satisfy a whole set of constraints. It is this set, and not any one of its members, that is most accurately viewed as the goal of the organization.

Perrow [1961] has classified goals as either official or operational. The official goals are those more apt to be found in the hospital charter and would provide general organizational purposes. The operative goals are the results of daily operating decisions and practices. The official goal for a hospital may be to deliver general health care services to the local population, while the operative goals are reflected in the amount of resources committed to certain facilities and activities.

The three most common goals probably held by society for hospitals are:

1. The delivery of medical care efficiently and economically.
2. Improved access to care for disadvantaged members of the population.
3. Improving and maintaining the quality of care.

A. HOSPITAL GOALS MODELS

Roos, et al. [1974], have suggested two hospital goals models: structure-specialization; and exchange.

1. Structure-Specialization Model

This model emphasizes that hospitals with different structures will pursue different goals. Certainly, one would assume that hospitals with different ownership structures would perform differently. Private, proprietary hospitals usually pursue efficiency and revenue generating activities in order to make a profit. Voluntary, non-profit hospitals usually pursue the goal of delivering high quality care. Government or public "owned" hospitals normally pursue the goal of providing access to care regardless of the ability to pay [p. 79]. The structure-specialization model implicitly assumes that quality, efficiency, and access are basically incompatible goals. Efficiency is seen to come only at the expense of lowering quality, while an emphasis on providing access is incompatible with providing high quality care.

2. Exchange Model

The exchange model emphasizes the relationship between the hospital and its environment. Each provide essential inputs for the other. Society exchanges resources for health services. Hospitals are dependent on four basic types of inputs: (1) doctors; (2) patients; (3) patient-support; and (4) capital funds for equipment and construction. Thus, the nature of the environmental influences on hospitals' operative goals would be expected to vary from one type of institution

to the next as the mix of suppliers of basic resource inputs vary. Probably the most significant input for the hospital is the physician, and since the hospital is almost totally dependent upon the community's physicians to be the attending staff, it will reflect to a great extent the personal goals of the community physicians. Hospitals have traditionally been characterized as the "physician's workshop," a place where the physician comes to administer care to individual patients. The hospital provides facilities and conditions which the physician is incapable of providing in the normal office. A recent trend is the decline in the percentage of physicians in office-based practice. From 1963 to 1973, the percentage of physicians in office-based practice fell from 68.6% to 59.6%. [Trends 1976].

B. HOSPITAL OBJECTIVES

Karen Davis [1972] has done research in an attempt to determine the financial objective of a non-profit hospital. Her study dealt with five likely hypotheses:

1. Recovery of Costs

In this case the hospital will charge a price for a service equal to the average cost of providing that service. In addition, it will add a percentage mark-up to allow for plant expansion and new equipment.

2. Output Maximization

Under this hypothesis the hospital will attempt to maximize the number of patients it will see subject to some

constraints, one of its constraints being that its budget deficit cannot exceed specified limits.

3. Quality and Quantity Maximization

This type of hospital is likely to provide a lower quantity of care than a quantity maximizing hospital. But it will use more inputs in producing any given level of care than a quantity maximizing hospital. This hospital is subject to a break-even constraint.

4. Utility Maximization

This occurs when hospital administrators seek to maximize their own utility; their utility being a function of the size of the hospital, the amount of modern equipment, and the professional prestige of physicians of the hospital staff.

5. Cash Flow Maximization

In this hypothesis the hospital will seek to maximize the difference between revenue and out-of-pocket expenses. An excess of funds over costs is desired so that additional facilities may be continuously added without the necessity of relying on gifts, government funds, or borrowed funds. This hypothesis also predicts that the hospital will make a profit.

The basic assumption has always been that those who control major decisions in non-profit hospitals pursue goals other than profit maximization. However, the evidence that was collected indicated that non-profit revenues exceeded non-profit expenses every year from 1961 to 1969, except for 1962. Net incomes during this same period rose from \$91 million to \$400 million. Net income per patient day climbed from 71¢ in

1961 to \$2.34 in 1969. The conclusion is that non-profit hospitals do make a profit and in fact these profits are increasing over time.

C. HOSPITAL OBJECTIVE FUNCTION

Berki [1972] states that the hospital is a complex organization that is attempting to maximize its objective function. As to what the objective function may be, it cannot be defined in terms of profit maximization as with other firms. Instead, it appears that the "... physician's decision-making role in the medical care process and the hospital's constituencies' desire for prestige are the important if not unique determinants of its objective function." [p. 19].

The following four functions have been suggested for a hospital:

1. To provide medical care for those that require it.
2. To assure medical education and the maintenance of acceptable medical standards in the community it serves.
3. To provide preventive medicine and promote good health.
4. To encourage continuing medical research.

Long and Feldstein have suggested that the objective of the hospital is to optimize some complex, differing, and ill-defined goal subject to financial constraints [Berki 1972]. Reder includes the physician in his suggestion that the objective is "... to maximize the weighted number of patients treated (per period of time), the 'weights' being the professional prestige of the doctors attending them" [Berki 1972].

It can also be suggested that the individual prestige of the doctor can be used as an indicator of the level of quality of care he can provide.

If the hospital's goals are specified in terms of quality, an effective constraint on expenditure will be the only limit to the amount of funds that it will devote to the pursuit of those goals. Baumol and Bowen, in their study of non-profit firms, conclude that "... the objectives of the typical non-profit organization are by their very nature designed to keep it constantly on the brink of financial catastrophe, for to such a group the quality of services which it provides becomes an end in itself....These goals constitute bottomless receptacles into which limitless funds can be poured" [Berki, 1972]. The objectives of the hospital are strongly influenced by the physician if he is seeking to maximize his income. He would have every incentive to push for increases in capital investment in facilities that would, in turn, increase his own productivity which in the end would increase his personal income. Berki [1972] proposes that the physician is the originator of most of the demands for hospital services; therefore, whether they seek to maximize their income through increased facilities or shape the hospital to their own needs, the physician, as the central decision-maker in the delivery of medical care, will make every effort to shape the hospital's objective function for his own purposes.

The only point in which there seems to be agreement in the hospital literature is that the objectives of a hospital

are vague, ill-defined, contradictory, and sometimes apparently non-existent. There is support for quantity and quality being in the hospital's goal set and that it is the physician who, to a great extent, can control or at least strongly influence both of these factors.

D. PHYSICIAN GOALS AND OBJECTIVES

A major goal for the hospital is to cater to the desires of the medical staff. Physicians will bring patients to the hospital available to them that offers the best facilities. When similarly equipped hospitals compete for doctors, the enterprising hospital will emphasize the features that it has that will insure the physician's comfort, convenience, and deference. The physician will want the hospital to be convenient to him and his patient. He wants easy patient admittance and professional freedom and will avoid anything resembling socialized or corporate practice of medicine [Roemer & Friedman 1971].

Pauly and Redisch [1973] have hypothesized a model that is probably more in line with reality. Under their model, it is the physician who is maximizing profits. They suppose that the non-profit hospital is started by two groups: the physician and the equity holders (trustees). In this hospital there are residual profits, but these profits go to the physicians instead of to the equity holders. To answer the question of why trustees would start this hospital and incur these costs, Pauly and Redisch [1973] point out that those who provide equity capital for a non-profit hospital must

"... be motivated by a desire on the part of contributors to make output available to themselves or those whom they would like to see consume it." [p. 98]. Their model has been criticized for leaving out any complete analysis on the behavior of trustees and concentrating only on physician behavior.

Pauly and Redisch [1973] assume a sort of group goal for the physicians on the medical staff of the hospital. They state, "... that the physicians on the staff of a hospital at any point in time act in such a way as to maximize the sum of the money incomes of all staff members." [p. 89]. Regarding the size of hospitals, the model would predict that in a period of rising prices hospitals would tend to be small for two reasons. One is that smallness would tend to maximize the net income per physician while at the same time allowing for coordination among the medical staff.

A model presented by Buchanan and Lindsay [1970] explores the two lines of authority that are present in the hospital and the conflict that must arise between administrative and medical decisions. The outcome of the conflict supports the supposition that it is the physician who usually comes out ahead in any disagreement. The two lines of authority and the resulting conflict exists between the hospital administrator and the physician, since the trustee is assumed to have very little control over the daily operation of the hospital. The administrator is seen as having very little incentive in opposing the physician; indeed, his own job

security depends rather heavily on how well he can recruit and maintain a content medical staff. This allows us to conclude that the hospital will be run in the physicians' favor since collectively they will be the dominant factor in its operation. Thus, since the physician has little direct incentive to keep hospital costs down, he will receive very little opposition to his demands of more expensive equipment and staff slack so that he can economize his own time, thereby allowing him to increase his own income. The fact that physicians' fees rose nearly 168% from 1950 to 1974 while the CPI rose only 98%, tends to support the hypothesis of the physician as an income maximizer [Trends 1976].

E. GOAL SETTING AND SUBGOALS

Perhaps for the majority of medical organizations the most satisfactory answer to the question of who sets goals is that goals emerge from a continual bargaining process among shifting coalitions of the more powerful participants [Cyert & March 1963]. The fierceness with which coalitions bargain is clearly affected by the state of the organization as a whole. If times are good and the organization is fat with resources, the several groups can afford to be generous in the bargains they strike; competing and even conflicting goals may be simultaneously pursued. However, in those lean times when the organization is forced to struggle for its very survival, hard bargaining takes place with the result that the desires of weaker groups are sacrificed.

A vexing problem is faced by organizations insofar as they parcel general goals into subgoals and delegate these subgoals to particular individuals or departments. In such cases--and they are very frequent in most organizations--what is delegated as a goal or end to the department is for the organization only a means for attaining a more general objective. For example, within a hospital, a goal for the radiology department--processing and interpreting X-rays--is only a means to attain a more general objective--arriving at a definitive diagnosis. Certain cognitive and motivational factors conduce participants to pursue their particular subgoals in ways which are not always consistent with the goal attainment efforts of related departments or of the organization as a whole. Thus, March and Simon [1958] note that a given participant assigned a subgoal will, because of the process of selective perception and rationalization, focus exclusively on attaining this objective without regard to the possibly negative consequences for the larger system to which his actions are supposed to contribute. These individual tendencies are reinforced both by the content of in-group communications and by the selective exposure of his department to stimuli from the larger organizational environment.

One characteristic of medical organizations encourages subgoal formation while another mitigates its negative consequences. The feature conducive to subgoal formation is the plethora of specialty groups brought together under a single organizational canopy. Such skilled occupational groups have

a trained incapacity to see situations in which they are involved from any perspective other than their own. They tend to exaggerate the importance of their own endeavors and see their own skills and standards as applicable to virtually every circumstance encountered. The organizational characteristic which helps to neutralize the negative consequences of subgoal formation is the type of departmental specialization which tends to predominate in medical organizations: most departments exhibit "parallel" rather than "interdependent" specializations. Parallel departments perform specialized but relatively independent functions; e.g., the departments of pediatrics and geriatrics. Interdependent departments perform specialized and interrelated functions; e.g., the departments of medicine and radiology or pathology. To the degree that departments are organized to function relatively autonomously of the rest of the organization, the negative effects of subgoal formation among departments will be minimized. However, as medical technology becomes more complex and medical specialty groups more specialized, parallel department organization is giving way to a more interdependent structure. The more pronounced these changes, the more deleterious the consequences of subgoal formation for the achievement of general organizational goals [Blau & Richard 1962].

While each health care organization adopts its own model of establishing corporate guides and policies, the one requirement that remains constant is that the development and articulation of institutional goals and purposes must reflect

an open and deliberate attention to the ends for which suitable strategies for results can be fittingly designed and toward which cooperative organizational efforts can be directed. What, in fact, is being experienced, as this requirement is satisfied, is the initial impact of management as it sets forth clearly, and decides firmly, where it wants to go and how it intends to get on with what needs to be accomplished.

F. SUMMARY

This chapter has reviewed the goals, objectives, and objective function of hospitals and the influences on the setting of goals. The literature is not highly developed on these topics and most discussions of them were in general terms. However, there was one point throughout the literature on which there seemed to be very little disagreement: the physician is the central figure in any discussion about the goals of hospitals today. The physician is the dominant factor in the medical care process; he determines the input to the hospital and oversees the process within the hospital.

The hospital, like any other organization, has the goal of producing an output. The problem in the hospital industry, though, is that it is unable to determine if, or measure how much output, it has produced. Even if the hospital's output is simply defined as "good health," how does one measure the amount that the hospital has produced? Therefore, the hospital is faced with finding some surrogate that it can measure

in order to have some measure of success. We discovered that some hospitals measure the amount of revenue they generate as an indicator of efficient delivery of health care. Others may measure the amount of deficit as an indicator of high quality care. While still another may measure how well it deals with its environment. One fact is certain: there is no guaranteed measure of goal achievement in hospitals today.

When examining the objectives of the hospital, we found that most are concerned with making a profit and expanding capital facilities. In fact, the term "non-profit" seems to apply on paper only. Again, we find the physician in a central role in the hospital's objectives, especially if he is interested in maximizing his own income.

It proved difficult to find any literature on the goals of the different decision-makers in the hospital. Very little was said about the administrator except that his biggest goal may be the satisfaction of the medical staff, while the trustees' goal may be providing care for the community. Both may also have a goal that they share with the physician--the goal of prestige in being associated with a particular hospital that is looked on as being "successful." Several authors saw the physician as having the goals of income maximization, professional recognition by his peers, and respect in the community. In the next chapter we will see how the goals of the various members of the hospital affect their decisions and what effect it has on costs.

VI. DECISION-MAKING

This chapter will deal with the decision-making process within the hospital and its relationship to the costs of resources allocated in the delivery of medical care. The purpose of reviewing the current literature on the decision-making process is to determine where the major resource allocation decisions are made and who makes them. This review will be from the viewpoint of whose decisions affect the utilization of resources the most and what is, or can be, done to control the costs involved.

The first section of this chapter will deal with establishing a definition of decision-making and the elements of a decision. Since there are many texts written on the subject of decision-making in general, it will only be reviewed very briefly in this section. The next section will look at the general environment of medical care decisions and the various decision-makers involved. The last section will cover the results of studies that were done on the effect certain decision-makers in the hospital have on costs and their general knowledge about costs.

A. GENERAL DECISION-MAKING

To study the decision-making process, it is first necessary to define a decision and the elements in the decision-making process. Turban and Meredith [1977] define a decision

as "... the conclusion of a process by which one chooses between two or more available alternative courses of action for the purpose of attaining a goal(s)." [p. 14].

Thompson [1967] states that, "Decision issues always involve two major dimensions: (1) beliefs about cause/effect relations, and (2) preferences regarding possible outcomes." [p. 134]. He does not imply that both of these dimensions are considered consciously in every discretionary situation, but that both are operating at some level. He calls these two dimensions the "basic variables" of a decision. With each variable there can be assigned a certain degree of certainty or uncertainty. When drawn in a matrix, it gives the four types of decision issues:

Figure 3
STRATEGY MATRIX FOR DECISIONS

		<u>Preferences regarding possible outcomes</u>	
		Certainty	Uncertainty
Beliefs about cause/effect relations	Certain	Computational	Compromise
	Uncertain	Judgmental	Inspirational

It should be clear that in each case a different type of strategy is necessary in making a decision. When there is certainty about the causal relations and possible outcomes, then all that is necessary is a computational strategy.

This type of decision is ideal for programming application onto a computer. When the outcome preference is certain but the causal relations are uncertain, then a judgmental strategy is called for in reaching a decision. The opposite situation of certain causal relations but uncertain outcome preferences calls for a compromise strategy. When there is uncertainty in both dimensions, then inspirational strategy is necessary for reaching a decision if indeed any decision can be reached.

We can observe the physician using judgmental strategy to a great extent when the outcome preference is known (a "well" patient), but the cause/effect relationship of a medication on the patient is relatively uncertain. If it were possible to define and measure health and the cause/effect relationships of various inputs into health care were known with a high degree of certainty, then the various decision-makers involved in the health care delivery system could apply computational strategy in arriving at decisions on health care. Decision-makers must be careful to avoid applying the wrong or inappropriate strategy, i.e., using computational strategy when the situation calls for judgmental or compromise strategy.

Young [1965] observes that decision-making is carried out at all levels of management and stated: "It is not the function of top management to solve all problems or make all decisions. Their fundamental obligation is to supervise the

decision-making activities of their immediate subordinates in the middle and lower levels of management in order to assure that their activities are being performed properly." [pp. 38-39].

Decision-making is dynamic and, as a result, an action-oriented process instead of one that is static. This is especially true in a health care facility where many of the departments interact with each other. The delivery of medical care in one department is often dependent upon the degree of performance of members of many other departments. This results in a chain reaction of decision-making effectiveness that is highly unique in the health care field. Decision-making is a continuous process. Once a decision has been made the process does not simply stop, but instead the decision must be implemented and, of course, during implementation decisions will also have to be made to assure that the original decision is being carried out [Rakich, et al., 1977].

Rakich [1977] has grouped decisions into four general classification sets as follows: (1) individual-group; (2) ends-means; (3) administrative-operational; (4) programmed-nonprogrammed decisions. They are not mutually exclusive but overlap. Each set is described as follows:

1. Individual-Group

There are basically two ways in which decisions are made, by an individual or by a group. Although group decision-making is sometimes appropriate, it can often lead to

a decision that is not optimal. Most health care facilities are structured so that certain individuals have the responsibility for a specific area and as such are responsible for the decisions made in those areas. However, the delivery of health care itself can be more characterized as group input to decision-making since the dynamics of patient care involve many departments and individuals working in unison.

2. Ends-Means

"Ends" decisions are those that deal with the determination of the objectives, i.e., what are the objectives ("ends") to be accomplished. "Means" decisions are those that deal with the strategy that will be involved in reaching the objective. The "ends" decisions for the organization as a whole are normally set by the board of trustees, with the "means" decisions usually set by the chief executive officer. Both have a major impact in terms of the input resources required by and activities that will occur in the organization. A department head will also make ends-means decisions in his area of control that will hopefully contribute towards the primary ends-means of the organization as a whole.

3. Administrative-Operational

Administrative decisions are those that are made by those individuals that occupy top level positions in the organization. These decisions, along with ends-means, have a significant impact on the organization and involve

substantial resources. These could be decisions such as: contracting for certain services; adding or deleting units; sharing services; or expanding services. Operational decisions are those which concern the day-to-day operation of the facility. These are usually made by department heads, heads of services, and supervisors. These may include decisions such as departmental equipment requirements, personnel assignment, and departmental routine or procedures.

4. Programmed-Nonprogrammed

These decisions occur at both the administrative and operational levels of the organization. Programmed decisions are those that are repetitive and routine in nature. These can often be covered by departmental or organizational procedure manuals that set forth the policy in dealing with a certain situation. Personnel policies, patient care procedures, and billing procedures are some examples of this type of decision. A nonprogrammed decision is one that may occur only once and therefore is a unique situation that cannot be planned on in advance. A decision that alters the organizational structure, changes, adds, or deletes some service that is being performed, or increases or lowers personnel levels is nonprogrammed.

Now that the general framework and elements of the decision process have been reviewed, the next section will begin looking into the hospital setting to examine decisions and the decision-makers.

B. GENERAL ENVIRONMENT OF MEDICAL CARE DECISIONS

The literature was examined to determine the type of resource allocation decisions the various decision-makers in the hospital make. The decision-making process in the hospital cannot be viewed as simplistic; it is intricate and complex and no longer the "physician's workshop," but a "community of interwoven skills and services." [Mountz 1975, p. 161].

Many persons argue that today's inflation problem in health care is primarily due to inefficient decisions in the hospital sector. To be sure, a great deal of evidence suggests that too much capacity to perform specific services exists in hospitals (nationwide). Hospital decision-makers are constrained by many factors though: (1) state and federal regulatory agencies; (2) the expected preferences of users; and (3) the practices of physicians and insurance companies. Clearly, hospitals have an acute information problem for rational planning. They must keep all four parties--government, users, physicians, and insurance companies--happy at the same time [Brown 1978]. Others argue that hospitals are consuming more and more resources in the delivery of medical care, not because of inefficiency or poor management but because of increasing demand for hospital services over which the hospital has no control; that hospitals are being blamed for the acts of others [Johnson 1977].

Hospitals and doctors are regarded as one by the public, with the physician seen as dictating and controlling all

activities associated with the hospital. With increasing frequency since 1966, the Congress and HEW have initiated controls that penalize hospitals for physician activities. The hospital has become a technological organization that provides sophisticated diagnostic and treatment facilities for a medical profession that has become increasingly specialized. It no longer exists as a patient care environment where nursing care was the primary ingredient.

Many of the attempts to model hospital behavior either view the hospital as controlled completely by administrators' preferences or lump all decision-making groups into an aggregated whole, creating a fictional entity not related to reality. These "organism" models, viewing the "hospital" as the acting body, tend to obscure the way operational decisions are jointly arrived at through the individual actions of patients, trustees, physicians, administrators, and other hospital personnel [Redisch 1978]. In a hospital, as well as other organizations, decision-making is a routinely occurring process that is never ending, dynamic, and very important. It can be linked to all of the other management functions, such as planning, organizing, staffing, and controlling, and is so pervasive in nature that all individuals in a health care facility who have the responsibility for resources will make decisions.

Many of those who try to understand or predict the reaction of hospitals to government regulation tend to overlook the unique relationship between the hospital and

the physician. It is the physician, operating as a separate entity outside the control of the board of trustees or the administrator, who influences most of the major resource decisions made in the hospital setting. The physician recommends admission, takes responsibility for ordering diagnostic procedures and therapeutic measures, and determines when the patient is fit to leave the hospital. In addition, it is the physician who typically engages in a lobbying effort with hopes of committing the administrator and trustees to invest in additional bed space, in personnel to help him provide more and better patient care, and in new and expensive technology [Redisch 1978].

Our high regard for the life of individuals and the relief of suffering has contributed greatly to the primacy of the physician in decision-making. The immediate good of the individual patient is thus placed above the more remote good of the group, even in the use of scarce resources. The physician and the patient enter into a personal contract where the physician is expected to protect the patient from harm and promote his general welfare. The patient pays the physician, not the hospital, for this service and the hospital becomes the physician's instrument for its attainment.

Weisbord and Stoewinder [1979] have used the back-seat driver analogy to describe the current strategies in cost control measures. The physician alone is the driver of the car and the most that hospital administration can do is heckle from the back seat; although to the general public

it would appear that the administrator is somehow in control of the car. Cost control legislation efforts have been aimed at the hospital and only indirectly at the physician; whereas, the physician, due to his unique relationship with the hospital, is the major decision-maker in the health care delivery system.

Fuchs [1974] has explained hospital expenditures in terms of a fairly simple formula:

$$\text{Expenditures} = \text{Admissions} \times \text{Length of stay} \times \text{Cost per patient-day}$$

[p. 96].

In order to make any change to the total of hospital expenditures then some change must be made to one of the variables. It is interesting to note the major player in each of the variable areas.

1. Admissions

Physicians control admissions; they decide who to admit and when to admit based on their evaluation of the patient's medical "need." In addition, the physician is influenced by many other forces, some of which may have nothing to do with the patient's medical condition, e.g., the general incidence of illness in the community, the availability of beds, the patient's ability to pay, the amount and type of medical insurance coverage, and the convenience to the physician of admitting the patient.

2. Length of Stay

With few exceptions, the physician determines when to discharge a patient. The time that a patient stays in

the hospital is somehow determined by what the physician feels is "appropriate" for the particular medical condition. The length of stay for the same condition has been found to vary among different physicians, different types of hospitals (large teaching hospital vs. a small community hospital), and for different regions and population mixes in the U.S. The length of stay has also been influenced by peer review and the amount of coverage allowed by third party payers.

3. Cost per Patient-Day

This cost is determined by the resources a hospital uses and has available for a particular number of patients each day. Weisbord and Stoewinder [1979] categorize resource distribution in the hospital into three functional components: patient care, support services, and administration.

The physician is the conductor, or "driver," of the first two categories. He directs the patient care team in their daily care for the patient. The physician determines the volume of support services, such as diagnostic tests and patient therapy. Once the physician has admitted a patient, he determines what kind of and how many diagnostic tests to order and he decides what kind of and how much therapy the patient needs.

The last category of administration is the only area where the administrator has some direct degree of control; however it, too, is not without influence from the physician.

It is fairly obvious at this point that in order to have any effect on the hospital expenditures in Fuchs'

equation we must influence the physician who is the major player in the variables. Overall, the physician controls total expenditures through his decision-making power in all of the variables.

Pellegrino [1972], in writing on the physician's decision-making process, states that the clinical decision is the "balance wheel of the hospital operation. It is the least accessible to organizational control--the most in need of freedom--yet the most potent of hospital processes for good and evil. The clinical decision is the most zealously guarded of the physician's prerogatives and at the same time the most in need of some kind of surveillance for individual and public good." [p. 301]. The hospital cannot deal with impunity with physicians. They are separate and apart from the hospital, even though they are also part of the hospital.

An opposing view to the power of the physician's decision-making process is presented by Watts [1972] who feels that the physician is gradually losing his decision-making power. This is due in part to the increasing general attitude that health and medical care are too important to be left to the doctors. It has become an extremely valuable commodity to more and more people while at the same time more complex and expensive to deliver. As a result, the physician has delegated or otherwise given up many decision-making responsibilities to other allied health professionals who now make many patient care decisions without the participation of the physician. With the increasing power of

the allied health professionals, multiple levels of quality and greater fractionation of care will result. It would seem that Mr. Watts is opposed to the issues that need to be addressed the most when he states, "... there are many more kinds of decision makers and their interests are apt to be more concerned with overcoming barriers to access or continuity of care, or providing more services at less cost, or with prevention, in the illusory hope that health care costs can be significantly improved if preventive measures are effectively used. Those with interests such as these have tended to focus their decision-making more upon the needs of the system as such than upon what individual patients need and want ..." [p. 12].

According to Dr. Russell Roth, M.D., past president of the AMA, physicians are a part of the solution, not the cause, of the problem of high hospital costs. "Though we don't have a handle on the hospital's costs--its payroll, the prices it pays for food, supplies, and utilities--we do have a handle on how much of this kind of service a patient uses and how long he stays in bed." [Mountz 1975, p. 161]. It would appear that Dr. Roth has overlooked the role that the physician has played in the increasing demand on hospitals for advanced equipment and highly skilled allied health professionals.

The two lines of internal authority in the hospital can lead to inevitable conflict between administrators and physicians. Yet the administrator has little at stake in

opposing physicians, particularly under a regime of unconstrained cost reimbursement. Viewed in this light, the administrator's role is simply to provide labor, supplies, and facilities to independent physicians. It is the physician who directs the actual provision of care in the hospital. In the hospital the medical staff makes the decisions concerning the delivery of the product, but it is the administrator whose decisions make it possible to deliver the product more efficiently and effectively [Jackson 1972, p. 49].

Zubkoff [1978] feels that the hospital administrator has little incentive to reduce costs in any non-administrative function. Consumers will talk rationally and objectively about reducing soaring hospital costs as long as neither the consumer or his family is ill. However, that same consumer will often seek out the best that money can buy when illness strikes him or his family. Areas in which the administrator can have some degree of impact through his decision-making are: selection and purchase of supplies; utilities, equipment and capital expenditures; manpower requirements; local, state, and federal planning activities.

The board of trustees presumably represents the public interest and bears some form of legal and moral responsibility for all activities, professional and otherwise, that occur within the institution. However, while each member of a typical board is a competent individual in his own field, he is unprepared for participation in the types

of issues and decisions involved in the management of the hospital. It is therefore not surprising to see a tendency in most hospitals for the board to abjure direct responsibility and to delegate authority to some internal physician group. This tendency is, of course, actively supported by the AMA, which suggests that "the responsibility of the hospital governing board is to provide the foundation for self-governance by the organized medical staff" (AMA). Once again, de facto physician control over resource-related decisions is not hard to establish [Redisch 1978].

It is evident that with the pervasive influence of physicians in resource allocation in the U.S. hospital system that any method of trying to hold down hospital cost inflation that is aimed solely at the "hospital" will fail miserably. HSA's, certificate-of-need, rate review, and alternative forms of reimbursement all provide the administrator with a rationale for confronting the physician staff. But today the benefits of siding with the physician are far more appealing to the administrator than opposing him. Most administrators see themselves in competition with other hospitals for physicians--not for patients. For without the physician, the patient cannot be admitted to the hospital. So, as long as other hospitals will allow him to admit patients, the physician will not be totally dependent on one hospital to earn his livelihood. The normal and predictable reaction of the administrator will be not to include or to put off as long as possible the involvement of the medical

staff in any negative budgetary decisions that must be made. It is not surprising that most physicians feel cost containment is an administrative issue, not a medical one [Redisch 1978].

C. DECISION-COSTS RESEARCH STUDIES

The literature was reviewed to identify studies which have been done on the costs of decisions in the delivery of medical care and the recommendations which have been made involving decision-making in hospital resource allocation. It was felt that a review of this nature might point to areas in which significant cost reduction can be achieved or lead to other areas that are in need of more research. The studies and research discovered ranged from general to very specific cost data and from "administrative" decisions to "medical staff" decisions.

A study at the New England Deaconess Hospital in Boston was done to determine the source of the major portion of hospital costs in the patient's bill. It was found that approximately 70 percent of the daily basic charge to the patient was for salaries of hospital personnel. Another 20 percent of the daily basic charge was for the costs of hospital supplies. The most significant hospital operating cost was general professional care, with nursing care being the majority of that cost [MacDonald 1971].

To get an idea of how physicians viewed costs, Medical World News [1977] had a survey conducted of practicing

doctors, both general practitioners and specialists. They had a sample size of over 1,600 from which they received 345 replies, a 21 percent response rate. The results indicated that 75 percent of the doctors felt that hospital charges are rising too rapidly. The majority opposed mandatory price controls, but favored more pre-admission testing of routine admissions and stepped-up surveillance by PSRO of in-patient care. Voluntary price controls won the approval of 54 percent of the respondents, while many frowned on other popular cost-control measures: 43 percent against reducing contractual fees to nonstaff doctors, 48 percent against reducing the ceiling of the patient's insurance coverage, 67 percent against second opinions on routine surgery, and 49 percent against greater emphasis on prepaid services ["How Doctors View Hospital Costs" 1977].

A somewhat similar study was done by Skipper, et al. [1976], on the physicians' knowledge of the cost of various diagnostic tests. The researchers felt that too much emphasis was being placed at the macro level on costs rather than looking at the micro level, such as the charges for laboratory tests. Laboratory charges were found to account for 26 percent of the patient bill in their study of 855 adult patients. Records from 1965-1970 showed that the percentage increase in laboratory costs was more than double the percentage increase in total hospital costs. A list of 31 of the most frequently ordered laboratory tests was made up and a total of 90 medical students and physicians were asked to

estimate the cost to the patient of each test to the nearest dollar. A total of 69 responded to the questionnaire but only 61 could be used since 8 of the respondents claimed they did not know enough about the costs of each test to even guess. For the purpose of the study, any response that was within 25 percent (plus or minus) of the actual cost was counted as an indication of good knowledge of the cost of a diagnostic test. Any response that exceeded the 25 percent was counted as poor knowledge of the cost of the test. The results are shown on the following table:

TABLE VII
PHYSICIAN'S KNOWLEDGE OF COSTS OF LAB TESTS

Medical Category	No. of Respondents	No. of Responses	(%) High Est.	(%) Good Est.	(%) Low Est.
1st yr student	9	279	45.4	27.6	26.9
2nd yr student	10	310	29.1	30.0	41.0
3rd yr student	11	341	12.6	34.6	52.8
Non-clinical faculty	8	248	28.6	38.7	32.6
House staff	11	330	30.6	30.9	38.5
Clinical faculty	12	372	20.7	44.6	34.7
Total	61	1880	27.2	34.6	38.2

[p. 196].

The results indicate that in total, approximately one-third of the responses showed good knowledge of cost. The overall tendency of the remainder of the responses was to underestimate the cost of the test. For students, the results show that as they progressed through school their knowledge of the cost of diagnostic tests began to increase.

The shift from overestimation to underestimation was dramatic. This would lead to the conclusion that the physician needs to be better informed of the costs of tests.

Many authors advocated physician membership and participation on governing boards. Schulz [1972] noted that since the physician had control of 88.4¢ of the hospital dollar, he should be involved in the governing board's decision-making process. He goes on to note, however, that of the hospitals he surveyed with medical staff board members, only 24 percent allowed physician participation in the review of income and expense reports.

One hospital which achieved good results with physician participation on the capital budget committee was the Valley Hospital located in a suburb of New York. The committee included three physicians, six trustees, and an administrative staff member, and the committee was chaired by one of the physicians. The physician members reviewed every capital equipment request submitted by a clinical department. Another committee reviewed non-clinical requests. Not stopping at just review and a decision on requests, the committee also follows up on all equipment it approved (\$10,000 or

more) two or three years after it has been purchased. This lets the requestor know that he may be required to support his sales pitch with facts later on [Azzara 1979].

If, in 1975, each of the nation's patient-care physicians had taken the following actions: (1) reduced the length of stay by one day for just one patient every week; (2) avoided overnight stays for two or more patients each week by using preadmission testing and ambulatory surgery facilities; and (3) reduced the number of X-rays he ordered each week by one and the number of lab tests by five, total savings would have amounted to more than \$6.6 billion, or 13.6 percent of total hospital expenditures for 1975 [Kirchner 1978].

In another effort to make physicians more cost conscious, the American Board of Internal Medicine now includes the cost of patient workups in its certification exams. The board provides feedback to the candidates and their training program directors on the cost of the management methods selected for test patients. The workup costs don't enter into the test scoring; they are cited to familiarize candidates with the possibility of saving money by using equally effective alternatives [Ferber 1979].

D. SUMMARY

This chapter contains a literature review on the decision-making process in resource allocation in the delivery of medical care. A basic definition of decision-making is a process where a choice must be made between two

or more alternatives. With the increasing cost of health care under more and more scrutiny, in particular hospital cost inflation, the resource allocation process would seem to be a logical area to determine whether less costly alternatives are available and, if so, can the decision-makers be induced to utilize them.

The next step was to investigate the decision-making process within the hospital to determine where decisions were made, who made them, and what were the cost implications. The majority of the literature reviewed indicated that it is the physician in his unique position in the health care system that controls or influences more than 80 percent of the hospital dollar. The physician, for the greatest part, works independently of the hospital control system, yet, the focus for cost control measures to date has been the hospital control structure rather than providing incentives that will change the physician's decision-making process.

In the last section, the relationship between decisions and specific costs and the physician's general knowledge of costs was explored. Most studies showed that the physician really had very little knowledge about the costs of the day-to-day, patient-to-patient decisions he made. Indeed, there is no incentive for him to know since his bills tend to be unquestioned and paid by third party payers! He is concerned with rising hospital costs, but does not favor any cost control measure that may cut into his personal income.

VII. ANALYSIS AND CONCLUSIONS

Most of the cost-oriented interventions in the health care sector to date have been externally initiated and treat the hospital in totality rather than recognizing its component parts. The premise of this study is that many costs are driven up by the decisions of individuals and groups within the institution. Consequently, an understanding of the decision process and its outcomes is crucial in the formulation of cost control mechanisms. Specific controls will require specific knowledge on who makes what types of decisions and why. Just as costs are a function of the hospital's decisions, so are decisions a function of the organizational features of the institution.

Four approaches to the problem of defining organizational realities were discussed: (1) functions and responsibilities; (2) relationships between bureaucratization and professionalization; (3) power and influence within the hospital; and (4) the goals of individuals, groups, and the institution as a whole.

This study assumes that the health care delivery system, as we know it today, is not likely to change significantly in the foreseeable future. The physician remains the dominant force in the hospital setting. Cost control mechanisms must focus on doctors to be effective.

A. ANALYSIS

The literature review began with an examination of the duties, tasks, and responsibilities of the following members of the hospital: (1) the governing board, (2) the administrator, (3) the medical director, and (4) the medical staff. The review found that the majority of the articles on duties, tasks, and responsibilities are normative in nature, but fail to establish a criterion or standard against which measurement can be made. There is an implication that if everyone performs their duties and responsibilities as described, proper organizational principles will result and effective management of the institution can be obtained. Moreover, the literature implies that effective management will lead to the ultimate goal of the hospital, the provision of quality care. However, when one seeks the definition of "quality," it is most often given in terms of inputs to the production of medical care (staff, resources, equipment, and drugs) or in terms of the throughputs (the actual process of care, clinical practice, and the organization of resources).

There appears to be an anomaly between the stated beliefs that quality care is a universally held objective and that goal congruence in the hospital is lacking. For instance, much of the literature assumes quality care as a common goal but goes on to describe the hospital in terms of physician income maximization, administrator status, and governing board prestige.

Some contend that conflict arises over the means of providing care rather than the outcomes. This appears to be an inappropriate differentiation that confuses, rather than clarifies the analysis of hospital problems. "Quality care," while being a positive phrase with which few would care to argue, remains an ill-defined concept. In fact, it is hypothesized that the vagueness surrounding the term is what makes it so appealing. Each individual is allowed to pursue quality care (the goal) in terms of his own actions (the process). Therefore, it may be more correct to say that if means are in conflict, goals must be also.

Since the delineation of functions and responsibilities appears to be linked to the goal of quality care, and quality care is subject to varying interpretations, a listing of organizational duties is analytically suspect. Goals should precede responsibilities and be related, in some measurable way, to the obtainment of the hospital's objectives. In fact, one finds the opposite is true. The literature supports an inversion of duties and goals, with the former attempting to define the latter. Consequently, the study of various group functions within the hospital is seen as largely unproductive. Even if all the individuals in the hospital performed their duties as specified in the literature, one would still not know if care was provided in an efficient and cost-effective manner.

The duties of the governing board appear to be couched largely in terms of approval rather than initiation.

While each may provide control over the functioning of the organization, the segregation of terms seems to exemplify some structural features of the hospital, both in the composition of the board and in the positions of administrator and medical director. It is suggested that the board tends to initiate policy in those areas where it perceives itself to have the necessary expertise. These include such duties as budgeting, raising capital funds, legal responsibilities, and certain managerial functions such as hiring the administrator and evaluating his performance. The trustee, who is most often from a business, legal, or financial background, appears to be comfortable with these responsibilities as they mirror, to a great extent, his principal occupation.

On the other hand, governing boards tend to function in an approval mode when they perceive themselves as lacking sufficient expertise. Peculiar organizational features of the hospital and evaluation of medical care are examples of decisions of this type. The board must rely on the reviews and evaluations of their staff. While "abdication" of responsibilities may be too harsh a word, nevertheless, the board is often at the mercy of the staff. Staff in this context is defined as the administrator and medical director. It is hypothesized that these positions exist primarily to satisfy the board's requirement for "knowledge resources." These resources are of increasing importance to the board because of recent legal decisions specifying trustees as ultimately responsible for medical care within the institution.

Although the administrator may have some special expertise in operating a hospital, it appears that the board can evaluate his performance. His usefulness to the board does not appear to lie in knowledge beyond the board's grasp, but rather in his day-to-day familiarity with the hospital. Conversely, the director has "medical" knowledge, a type of expertise not easily obtained by the board. While both are considered "company men," they can exhibit tremendous influence on the functioning of the hospital: the administrator with his knowledge of operations and the director with his knowledge of medicine. Thus, there appears to be a paradox: the board is legally and morally responsible for the organization and provision of medical care, but it has little direct control over the day-to-day operations of the hospital. Moreover, it appears that the board often chooses not to use what influence it has. Consequently, control over the hospital rests largely with the administrator, director, and as will be seen later, the medical staff.

Since the board is largely dependent on others within the organization, it is hypothesized that the board is not a proper focal point for cost control interventions. Such mechanisms must delve deeper into the organization with the board playing a supporting role

Behavioral and structural features of the hospital have been analyzed through the concepts of professionalism and bureaucracy. Much of the literature isolates on one or the other and concludes that the hospital exhibits elements of both.

It is hypothesized that the understanding of these concepts is important in discerning the values of the participants in the hospital. Professionalism and bureaucracy provide backdrops for conflict over authority, control, and performance evaluation. While the literature is well-defined in this area, it appears less than adequate in describing organizational features within a profession. Although the basis of peer review is collective physician control over the individual practitioner, few studies have been done on colleague governance. Perhaps control through a company of equals is more of an ideal state than an empirical phenomenon. More research needs to be done in this area.

Lest the reader assumes that physicians have complete autonomy within the profession, it should be noted that the physician's nationally oriented power block, the American Medical Association, may militate against physician autonomy. The AMA was originally established by physicians to lobby for legislation beneficial to doctors. However, it is suggested that the AMA has grown so large that it has become an institution unto itself, subject to its own organizational needs and political influences. The desires of an individual physician may be subordinated to the needs of the organization for survival. The AMA can work through the state and county medical societies to affect licensing of physicians, or to bring other pressures upon the practitioner to support the larger interests of the association. Hence, another paradox is evident: The professional organization formed to counteract

the bureaucratic characteristics of hospitals is, in fact, itself bureaucratic. The collective ideals of physicians may dominate the individual; exactly the situation to be avoided in the hospital. Whether or not a single hospital can ascertain the AMA's influence in its own organization is problematic. The physician may view the AMA as a teammate or an opponent. In any event, the AMA appears to have very little direct influence over controlling the daily actions of the physician or controlling costs.

In a direct sense, the analysis of professional-bureaucratic conflict as a means of determining organizational goals is mostly unproductive. The characteristics of professionalism and bureaucracy focus on the organization of work rather than goal and task definition. However, as previously noted, knowledge of objectives is primary in the determination of costs.

The value of studying the relationships between professional and bureaucratic modes of organization is seen in its implications on struggles over the right to make decisions. Physicians and hospitals exhibit interdependencies. In today's complex health care system, neither is likely to survive without the other. However, these interdependencies are seldom in equilibrium. At any given point in time, one individual or group tends to dominate the actions of the others. As a result, constant power struggles occur within the hospital as less influential persons attempt to increase their organizational leverage. Concurrently, those individuals or coalitions

in power attempt to structure the institution and its rules and regulations to further improve their advantage. Hence, power to define the organizational realities in hospitals is seen as both efforts of the dominant force to stay in power and secondary group's efforts to increase their power.

Power conflicts are determined by the issues of expendability, leverage, and influences of those working in the hospital. In looking at the four groups studied, it appears that the physician is the least expendable. The hospital can still function, to a degree, in the absence of the board, the administrator, and the medical director as long as the physician is present. But it ceases to function, almost completely, without the physician. He alone controls the essential input into the hospital, the patient.

However, the physician's leverage is not absolute. It is dependent to a degree on the external alternatives available to him. These alternatives include: (1) the number of other hospitals in the geographical area; (2) the physician's prestige and standing in the community; and (3) the degree of collective power physicians have in the hospital. On the latter point, it is suggested that individually the physician cannot pose much of a threat to the hospital. But collectively, doctors have the means to turn the hospital to their advantage, or to seek alternative means of organizing their services. These alternatives do not appear to be under the control of the physician in the short-run; however, it does appear that physicians tend to locate in areas where they can maximize

the alternatives available. Certainly, the physician has more mobility than the institution, despite his reliance on a practice built over a long period of time.

In spite of increased professional training and status of administrators and greater focus on board accountability for the actions of physicians, it is posited that doctors are the dominant force in the institution. Their superior organizational position has three causes: (1) only they define medical care and determine the need for it; (2) they control the patients and thus utilization; and (3) they control the complexity and content of the work. Simply speaking, it is the physician whose control over the production of medical care is paramount. Moreover, since they control production, physicians have the strongest influence over the costs of medical care. It is their decisions in the day-to-day delivery of services that result in a major component of health care costs. Therefore, it is hypothesized that to control hospital costs, one must develop methods of influencing the physician in his decision-making process.

B. CONCLUSIONS

Current cost control mechanisms are being applied to the hospital both externally and internally. Their success in controlling costs is dependent on the power and influence of the participants in the hospital, most especially the physician as the dominating figure.

Internal cost control interventions are professionally controlled. They include such processes as Professional

Standards Review Organization (PSRO) and utilization review. It appears that these methods of control are compromised because they are controlled almost totally by the physician. Physicians tend not to override the professional judgement of other practitioners within reasonable boundaries. Moreover, it is physicians who establish the definition of reasonable boundaries. It is suggested that in this type of control there is no reason to believe that the whole will be any more effective than the sum of its parts. It is doubtful that collective control of costs and utilization by physicians will be substantially different from the actions of the individual physicians themselves.

External control of costs, primarily through government and third-party reimbursement, is directed to the hospital as a whole rather than to any one group within the hospital. However, because it does not focus on the dominant figure in the hospital--the physician--its chances of success are limited.

Controls generated from outside the institution must pass through the organizational positions of governing board, administrator, and medical director. While the governing board is responsible for compliance with the controls, the administrator and the medical director are instrumental in determining the degree to which controls filter down to the medical staff. This poses a significant problem since the relationships between the director and the administrator are ill-defined. On the one hand, they are both "company men,"

but they lack a common background. The administrator approaches the hospital from an organizational and bureaucratic perspective. The director, despite his administrative type of position, is likely to retain many of the ideals and precepts associated with professionalism. A second difficulty is the lack of agreement on which duties each is to perform. No generalization of administrator-director relationships can be drawn from the literature. Each hospital appears to be unique; differing perspectives and duties are integrated through negotiation. The significance of individualized relationships is the lack of predictability from one hospital to another. Since there is no way of knowing how cost control measures will be altered as they pass through the administrator-director filter, one cannot predict with any certainty how useful the administrator or director will be in implementing cost control interventions.

Efforts for cost control can be broached from two perspectives: (1) resource allocation; and (2) resource utilization. The control of resource allocation can be viewed in the traditional managerial sense. It focuses on actions like planning, controlling growth, sharing services, contract management services, and certificate of need laws. These functions are seen as being within the scope of the administrator's responsibilities. They represent management responses to rising costs in the hospital. While they are important methods for reducing demand on the hospital's resources, it is posited that they cannot stand alone.

Additional mechanisms are required. This study postulates that few attempts have been made for control through the second perspective. The control of resource utilization is necessary to a much greater extent because the physician determines almost completely the resources consumed in the hospital. More specifically, the essence of hospital utilization occurs when the physician makes an internalized, professional judgement based on his estimation of need for treatment of a specific patient. It is at this point that a majority of institutional resources are committed and costs incurred. The physician decides what care is to be given, the quantity to be provided, the intensity of the care, and the length of the treatment. Therefore, the following conclusion is reached: To control costs in hospitals, incentives must be determined that will cause the physician to integrate the elements of cost control into his subset of professional judgements.

There is no need to force physicians to have the same goals as administrators, medical directors, and governing boards. What is needed are interventions, both structural and behavioral, that will facilitate goal congruence among all the parties. In this regard, perhaps more research should be directed towards incentives like those found in Prepaid Group Practice and Health Maintenance Organizations. These organizations seem to have been able to alter to some degree the internalized judgement process that the physician undertakes in the treatment of his patient.

APPENDIX A

AMERICAN HOSPITAL ASSOCIATION DESCRIPTION OF FUNCTIONS OF GOVERNING BOARDS, ADMINISTRATORS, AND MEDICAL STAFF¹

The American Hospital Association has formulated a trustee development program designed to improve the performance and understanding of hospital boards of directors. This effort has culminated in the formal detailing of the functions belonging to the board, the administrator, and the medical staff. Each function is followed by examples.

GOVERNING BOARD

1. Establish and maintain procedures for conducting the business of the board.
 - a. Hold regular meetings.
 - b. Follow parliamentary procedures.
 - c. Keep minutes of meetings.
 - d. Establish committee structure.
2. Establish and update goals and policies for the hospital.
 - a. Provide high-quality medical care for the entire community (goal).
 - b. Limit admissions of Medicare patients (policy).
 - c. Refuse to perform abortions (policy).

¹ Sources: "Trustee Development Program - Unit 1"
Trustee April 1977, pp. 17-24.

"Trustee Development Program - Unit 2"
Trustee May 1977, pp. 17-24.

3. Develop and continuously update a long-range plan for the hospital and ensure that decisions are made in accordance with that plan.
 - a. Make current decisions in line with the long-range plan.
 - b. Evaluate trends in medical care and delivery.
 - c. Identify services to be offered and those not to be offered.
4. Monitor and evaluate plans and programs to ensure that they meet hospital goals and policies and the objectives of the long-range plan.
 - a. Approve affiliation with another hospital.
 - b. Approve acquisition of major medical equipment.
 - c. Review proposal for addition of burn unit.
5. Ensure the hospital's long-range financial stability.
 - a. Invest large cash balances.
 - b. Review hospital rate structure.
 - c. Make decisions concerning lease or purchase of equipment.
 - d. Plan development program and engage in fund raising.
6. Select the Chief Executive Officer, define his duties and responsibilities, and evaluate his performance.
 - a. Identify selection criteria.
 - b. Conduct formal performance review.
7. Approve selection of medical staff and ensure that it is properly organized.
 - a. Approve addition of surgeon to medical staff.

- b. Award privileges to physicians.
 - c. Approve recommended reappointments.
 - d. Approve utilization review reports.
8. Provide a process for evaluation of all phases of hospital performance, including the quality of medical care.
- a. Approve ranges for efficient department operation.
 - b. Question high rate of normal tissues removed.
 - c. Ensure compliance with various codes and standards.
9. Ensure that the community the hospital serves is well informed about the goals and performance of the hospital; ensure that the hospital is meeting the community's needs.
- a. Survey community health care needs.
 - b. Provide for special health needs of the hospital's community.
 - c. Represent varied community groups.

ADMINISTRATOR

The administrator is directly accountable to the board of trustees for the day-to-day operation and administration of the hospital. Thus, his duties complement those of the trustee. The administrator has the following functions:

1. To develop and maintain programs that implement board-authorized goals and policies.
 - a. Develop a program for ensuring on-going communications with Health Systems Agency.
2. To develop and, with board approval, implement an organizational and staffing plan for hospital operations.

- a. Clearly specify limits of authority delegated to employees.
- 3. To act as a liaison to the community and to other health care institutions.
 - a. Serve on a state health care advisory group.
- 4. To coordinate and facilitate appropriate interaction and communication among the various groups working at the hospital.
 - a. Make sure that the board and the medical staff are communicating appropriately.
- 5. To develop and implement evaluation procedures for all functional areas of the hospital.
 - a. Report wage and salary administration plan.
- 6. To safeguard and ensure appropriate use of hospital resources.
 - a. Report to the board on hospital performance as shown by operating budgets.

MEDICAL STAFF

The organized medical staff is directly responsible for the quality and scope of medical services delivered in the hospital. This authority is delegated to the medical staff by the board, which retains the ultimate and legal responsibility for the quality of patient care. Depending upon the hospital, there are six or seven areas of responsibility that make up the role of the medical staff:

1. To implement policies and procedures designed to provide patients with the best possible medical care.
2. To recommend medical staff appointments and clinical privileges in order to provide a balanced and competent medical staff.
 - a. Recommend appointment of surgeon with privileges to perform orthopedic surgery.
3. To develop and implement a quality assurance mechanism, including peer review of the process and the outcomes of care.
 - a. Perform medical audit.
 - b. Conduct tissue committee review.
4. To provide continuing medical education for its members.
 - a. Offer a course on allergic reactions.
5. To develop an organizational structure that will enable the medical staff to relate to the board and to govern itself.
 - a. Develop medical staff bylaws.
 - b. Select chief of staff.
 - c. Set up committees.
6. To provide graduate medical education, if necessary.
 - a. Provide residency training program.
7. To conduct medical research as authorized.
 - a. Study causes of hypertension.

APPENDIX B

CATHOLIC HOSPITAL ASSOCIATION DESCRIPTION OF FUNCTIONS OF GOVERNING BOARDS, ADMINISTRATORS, AND MEDICAL STAFF¹

The Board of Trustees of the Catholic Hospital Association has developed two documents dealing with the functional responsibilities of trustees, administrators, and medical staff. The first of these, published in 1970 and entitled, "Responsibilities, Functions, and Selection Criteria for Hospital Boards of Trustees," was board specific. Subsequently, the Catholic Hospital Association recognized the need for a second document dealing with the other main components in the hospital. This document was forthcoming in 1974 and was entitled, "Guidelines on Roles and Relationships of Board, Chief Executive Officer, and Medical Staff of Catholic Hospitals and Long-Term Care Facilities." The following is a summary of the functions identified within these two publications.

GOVERNING BOARD

1. To determine the hospital's objectives and major policies.
 - a. Analyze and evaluate data which reflects the community's present and projected health needs.

¹ Sources: "Guidelines on the Responsibilities, Functions, and Selection Criteria for Hospital Boards of Trustees." Hospital Progress, February 1970, pp. 35-46.

Farrier, Robert M. "Board, CEO, and Medical Staff Relationships." Hospital Progress, October 1974, pp. 71-78.

- b. Require professional administrative staff to make available, on a regular, periodic basis a profile of the present and projected needs of the community served.
 - c. Require administrative staff to continually suggest and/or clarify hospital objectives, goals and policies.
 - d. Establish criteria for evaluating the adequacy of objectives, goals, and policies.
 - e. Determine whether the hospital's philosophy and policies are consistent with those of the sponsoring group.
 - f. Determine the scope of services to be offered.
 - g. Determine changes to be made in the scope of services offered.
 - h. Approve, reject, or modify objectives, goals, and policies--the controlling expressions of the hospital entity.
2. To assure that major plans and programs are designed to meet objectives.
- a. Provide a long-range plan, in written form.
 - b. Appraise the community's health needs and the hospital's objectives and plans in terms of their compatibility.
 - c. Coordinate the hospital's long-range plan with the capital requirement plan.

3. To establish a suitable mechanism for conducting the business of the board.
 - a. Elect officers of the board.
 - b. Establish and/or abolish committees of the board.
 - c. Appoint chairmen and members to committees of the board.
 - d. Define the powers of committees of the board.
 - e. Recruit new board members.
 - f. Determine the size of the board.
 - g. Remove ineffective board members.
 - h. Fill vacancies on the board.
 - i. Maintain, revise, and enforce the corporate charter and bylaws.
4. To approve hospital organization and major authority delegation patterns.
 - a. Review the hospital organizational structure and approve major organizational changes.
 - b. Require final approval by the board before any proposed changes can be implemented in the bylaws, rules, and regulations governing groups within the hospital.
5. To select and appoint the chief executive officer (administrator).
 - a. Define responsibilities and extent of authority of the chief executive officer.
 - b. Determine job performance standards for the position of chief executive officer.

- c. Conduct periodic reviews of the chief executive officer's performance relative to the predetermined performance standards.
 - d. Fix compensation of chief executive officer.
 - e. Ensure the existence of a plan for continuity of top management.
6. To maintain a qualified medical staff.
- a. Ensure that an adequate system exists to effectively examine and review credentials and delineate medical staff members' privileges.
 - b. Establish a means of ensuring that information the board needs to make decisions on the appointment, suspension, termination, and reappointment of medical staff members is made available.
 - c. Ensure that an adequate appeal mechanism exists which protects the rights of physicians whose privileges have been denied or restricted.
7. To provide for long-range financial stability.
- a. Determine hospital policy in regard to procuring finances for growth.
 - b. Determine hospital policy concerning borrowing, leasing, or other methods of financing.
 - c. Determine guidelines for major areas of care utilization.
 - d. Approve broad rate policies.
8. To make major hospital decisions.

- a. Approve financial and other major reports that are directed to the public and other interested parties.
 - b. Approve major short-term loans and all term loans.
 - c. Review and/or approve major contracts, such as those for acquisition or sale of real estate.
 - d. Authorize officers to sign various written binding documents and to take final action.
 - e. Approve major personnel and labor relation policies and programs that shape the essential character of personnel and labor relations.
 - f. Approve all merger or acquisition activities.
9. To safeguard hospital assets.
- a. Approve, reject, or modify hospital budgets (operating and capital) submitted by the chief executive officer.
 - b. Select and retain outside auditors.
 - c. Approve actions that dispose of substantial assets.
 - d. Review and approve donations and contributions to and by the hospital.
10. To approve board policies concerning relationships with external groups or organizations.
- a. Provide for such representation and involvement in national, state, and local hospital association boards, planning agencies, consumer groups, and related health agencies or groups as is deemed appropriate and necessary.

- b. Maintain contact with legislators and government agencies.
 - c. Approve, reject, or modify hospital policy positions concerning legislation, governmental agency administrative policies, and other matters of public policy.
11. To analyze and evaluate the total hospital operation including all activities and services.
- a. Identify the board's need for information and arrange for timely supply of this information.
 - b. Provide for independent review of performance reports.
 - c. Review hospital performance in terms of policies, objectives, and plans.
 - d. Inquire into causes of major performance deficiencies.
 - e. Take appropriate action to correct deviations from planned and desired standards of performance, as indicated.

CHIEF EXECUTIVE OFFICER

- 1. To integrate the philosophy of the sponsoring group into the total operation of the patient care facility.
 - a. Establish an information system which will help all employees and physicians to fully understand the sponsoring group's philosophy.
 - b. Establish educational and discussion programs to determine how this philosophy can be more meaningful and visible to patients and the community.

- c. Evaluate the effect that implementing the philosophy has on the overall quality of care.
- 2. To initiate programs that ensure that adequate comprehensive planning takes place throughout the institution and to be sure that there is developed orderly decision-making processes within the facility.
 - a. Recommend new policies and objectives to the board, in response to identified needs.
 - b. Develop programs to achieve both short and long range institutional objectives.
 - c. Participate in board evaluations of civic community and institutional needs.
 - d. Implement board-authorized decisions on policy and objectives.
- 3. To assure the development and implementation of a plan for delegating authority which assigns responsibility for specific procedures to specific positions within the organizational structure, including the medical staff organization.
 - a. Clearly define responsibility and specify the limits of authority delegated to each subordinate who reports to the chief executive officer.
 - b. Develop a plan whereby each such subordinate is responsible for developing and submitting short and long range objectives for approval.

- c. Assure that each subordinate has a plan for delegating authority and exacting accountability within his area of responsibility and that the plan is functioning properly.
- 4. To establish mechanisms for exacting accountability from the medical staff and to act as the official channel of contact between the board and the medical staff organization.
 - a. Keep the board informed of the clinical practice and participation of each physician in the operation of the medical staff organization.
 - b. Assure that the official channels between board, chief executive, and medical staff remain open and effective.
 - c. Establish appropriate mechanisms for decision-making by physicians within the limits of delegated authority.
- 5. To appoint subordinate managers to positions of authority, provide for their continued development, and evaluate their performance.
 - a. Determine performance standards for each subordinate who reports to the chief executive officer.
 - b. Provide a plan for continuity of succession in all management positions, whether from inside or outside sources.

- c. Develop management talent at all levels of the organization, including the medical staff, by encouraging managers to attend internal and external management development programs.
 - d. Evaluate the individual's performance as a member of the management team.
6. To develop a system for coordinating and integrating all resources available to the medical care institution in an effort to achieve the primary objectives of excellence in the provision of care to those who need it.
- a. Establish a system by which decisions are made at the most appropriate organizational level.
 - b. Establish criteria for evaluating the merits of actual or suggested decisions.
 - c. Involve physicians, subordinate managers, and employees in the decision-making process.
 - d. Develop a management information system that provides necessary information to those who need it when they need it.
 - e. Periodically evaluate the communication system to determine its effectiveness.
7. To establish evaluation systems for all aspects of organizational operation, including the quality of care provided, and regularly report the evaluation results to the board.
- a. Insure that information collected and recorded is pertinent to the objectives of the institution.

- b. Take appropriate action to correct deviations from established plans.
 - c. Insure that in each subordinate department, the manager is utilizing appropriate information in evaluating his department's performance and evaluating each individual employee's performance.
 - d. Evaluate the need for modifying activities when modification is appropriate in order to respond effectively to new needs or changed conditions.
8. To actively participate in improving the health care delivery system in an effort to make comprehensive care available to all citizens.
- a. Serve on committees, boards, and advisory groups in the local community which will influence the local, state, and national health care delivery system.
 - b. Carry out those policies of the hospital that relate to local health planning efforts.
 - c. Cooperate with other health or patient care agencies and providers in improving the level of health in the local community.
 - d. Periodically report to the board on how the facility fits into the overall community health plan.
9. To inform members of the religious congregation assigned to the hospital of issues that are of concern to them as members of the sponsoring group.
- a. Conduct meetings with local religious groups to inform them of issues being discussed that relate to the group's interest.

10. To insure the safeguarding and appropriate use of institutional resources (people, facilities, and finances).
 - a. Submit budgets to the board for action.
 - b. Regularly report to the board the results of actual performance compared to approved budgets.
 - c. Present long-range plans for providing additional resources and changes in services.

MEDICAL STAFF

1. To serve as a quality control mechanism designed to insure the continual upgrading of the quality of medical care rendered by physicians, with the safety and interest of patients taking precedence over all other concerns.
2. To provide a formal structure, within the total institutional organization, whereby physicians can participate in the institution's policy-making and planning process in an organized fashion.
3. To review, analyze, and evaluate the clinical practice of all members of the medical staff to determine the quality of medical care in the hospital.
4. To make recommendations to the chief executive officer and the board for establishing, maintaining, and enforcing professional standards for the continuing improvement of the quality of care rendered in the health care facility.
5. To report regularly to the board on the quality of medical care in terms of these professional standards.

6. To exercise necessary discipline over the members of the staff for violation of policies of the institution, within the limitations of the authority delegated by the board.
7. To plan and implement continuing education programs directed toward improving the quality of care provided.
8. To assure that the objectives to be achieved by the medical staff organization are within the context of the overall philosophy and objectives of the hospital.

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